YEAR OF ZAYED

هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

News, Events, Business, Energy and Sustainability

AL MASDAR

www.dewa.gov.ae

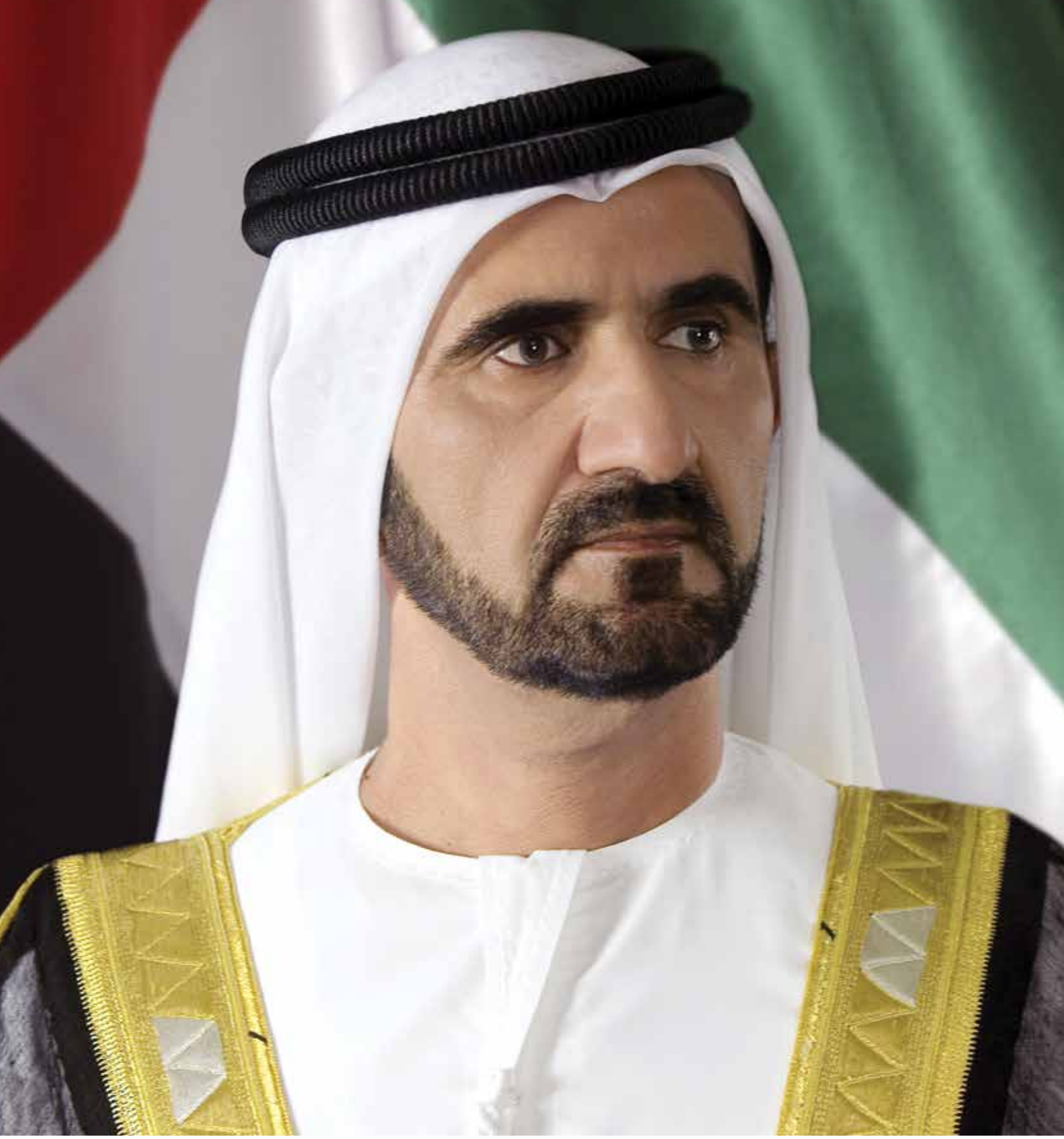
ISSUE 67
JULY 2018

1ST STAGE OF 3RD PHASE OF SOLAR PARK INAUGURATED

DEWA CAMPUS FOR OCCUPATIONAL AND ACADEMIC DEVELOPMENT OPENED

Largest number of main category awards at **21st DGEP awards**

DEWA ENHANCES ELECTRICITY AND WATER INFRASTRUCTURE TO KEEP PACE WITH GROWING DEMAND



> Developing the UAE's infrastructure is top priority for the leadership and vital to raising the country's global competitiveness. The UAE is developing a new model for sustainability and innovation and is keen to find creative solutions based on international best practices and benchmarks. The country is a pioneer in transforming its energy sector to one based on solar power and clean energy.

HH Sheikh Mohammed bin Rashid Al Maktoum

Vice President and Prime Minister of the UAE and Ruler of Dubai

Our Vision

A sustainable innovative world-class utility.

Our Mission

We are committed to the happiness of our stakeholders and promoting Dubai's vision through the delivery of sustainable electricity and water services at a world-class level of reliability, efficiency and safety in an environment that nurtures innovation with a competent workforce and effective partnerships; supporting resources sustainability.

Our Values

Stakeholders' Happiness, Sustainability, Innovation, Excellence, and Good Governance.

Our Motto

For generations to come.

MD & CEO MESSAGE

SAEED MOHAMMED AL TAYER
MD & CEO OF DEWA
Dubai Electricity and Water Authority

Towards a more sustainable future for our beloved country

Sustainability is a global priority to meet current needs without compromising the ability of future generations to meet their needs. Sustainability is gaining importance in the UAE due to rapid urbanisation and development. The UAE aims to ensure sustainable development while preserving the environment and achieving balance between economic and social development. This confirms the commitment of the wise leadership, represented by His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, and His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to ensure sustainable development.

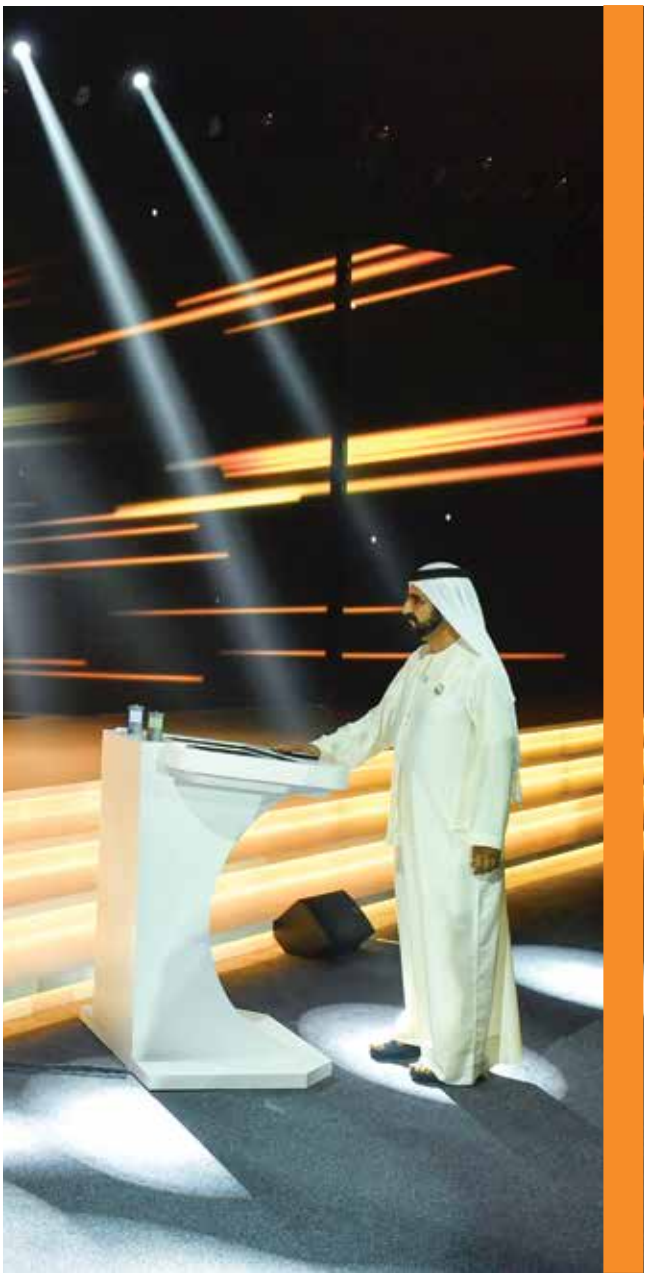
To achieve these objectives, the UAE Vision 2021 and the UAE National Agenda focus on improving air quality, conserving water resources, increasing clean energy and implementing green growth plans. The Carbon Abatement Strategy aims to reduce carbon emissions by 16% by 2021.The UAE Centennial 2071 aims to ensure a happy future and a better life for future generations, and make the UAE become one of the best countries in the world. Dubai Electricity and Water Authority (DEWA)'s strategy and plans are aligned with the UAE's national and international plans and objectives including the United Nations Sustainable Development Goals (SDGs) 2030. Sustainability is the essence of our strategy, vision and mission. Since 2012, we have established it as a priority by including it in our vision. DEWA's strategy has evolved by ensuring the three dimensions of social, economic and environmental sustainability, giving us a sustainable and integrated business strategy. We have an investment of AED 81 billion over the next five years to meet growing demand for energy in the Emirate. This will support the growth of the green economy and create a competitive advantage for clean energy and energy efficiency in the UAE. This also supports the objectives of the Dubai Clean Energy Strategy 2050 to make Dubai a global hub for clean energy and green economy by providing 75% of Dubai's total power output from clean energy by 2050.

To achieve this, we are working on the construction of the Mohammed Bin Rashid Al Maktoum Solar Power Park, which is the largest single-site solar park in the world, with a planned capacity of 5,000MW by 2030, and a total investment of AED 50 billion using the Independent Power Producer (IPP) model. The solar park currently produces 413MW from photovoltaic technology. The 800MW photovoltaic third phase and the 700MW CSP fourth phase are currently under construction. To reach our target of 75% by 2050, DEWA needs to be able to generate of 42,000MW of clean and renewable energy. This will contribute to transforming Dubai into a global hub for clean energy and green economy, to become the city with the lowest carbon footprint in the world.

As part of our partnership with Expo 2020 Dubai, as the official Sustainable Energy Partner, we intend to speed up the completion of our projects to provide sustainable energy to the facilities of World Expo 2020. We also aim to achieve His Highness's vision to host the best World Expo in Dubai in 2020 and promote the UAE and Dubai's global position. DEWA continues to create a distinctive energy infrastructure to meet all the needs of sustainable development in the Emirate, and provide electricity and water services, according to the highest standards of availability, reliability, and efficiency

CONTENTS

COVER STORY



FEATURE STORY

NEWS

WOMEN'S COMMITTEE

INTERVIEWS

OTHER NEWS

SUSTAINABLE CITIES

HH Mohammed bin Rashid Al Maktoum inaugurates 200 MW first stage of third phase of Mohammed bin Rashid Al Maktoum Solar Park

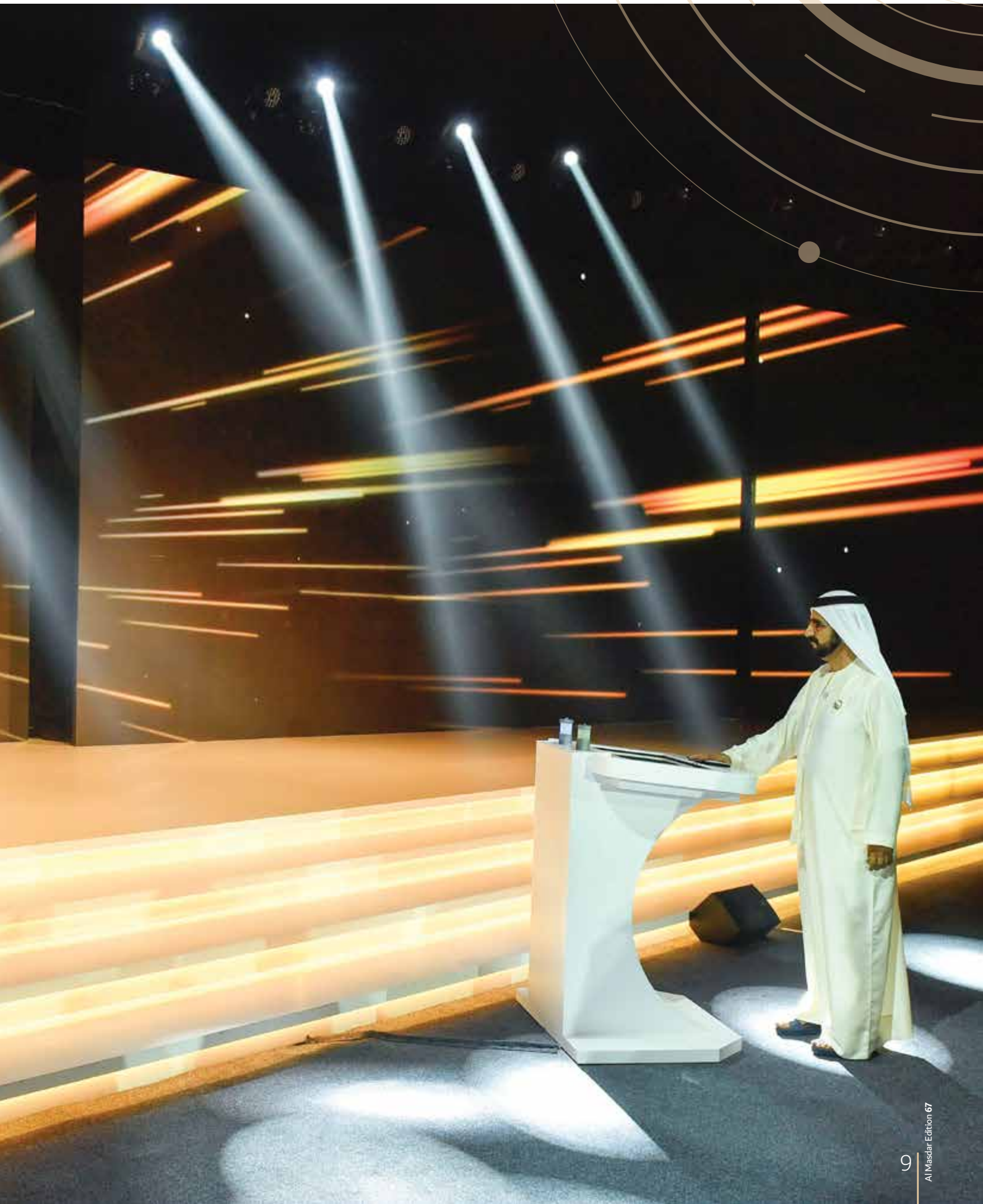
HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has inaugurated the 200 megawatt (MW) first stage of the 800MW third phase of the Mohammed bin Rashid Al Maktoum Solar Park. The solar park is one of the major projects that DEWA is implementing based on the Independent Power Producer (IPP) system in partnership with a consortium led by Abu Dhabi Future Energy Company (Masdar) and EDF Group, through its subsidiary EDF Énergies Nouvelles. The second and third stages of the third phase, which have a capacity of 300MW each, will be completed in 2019 and 2020 respectively.

The inauguration ceremony was attended by HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, and a number of Ministers and Director Generals of Dubai government departments.

HE Saeed Mohammed Al Tayer, MD & CEO of Dubai Electricity & Water Authority (DEWA), welcomed HH Sheikh Mohammed bin Rashid Al Maktoum and said, "We are honoured by Your Highness being present today and your generous patronage of today's inauguration. Today marks the commissioning of the first stage of the third phase of the Mohammed bin Rashid Al Maktoum Solar Park. This phase is a key milestone and shows our strong belief in the role of clean energy in shaping a sustainable future. This supports the UAE's efforts to strengthen its leading global position in clean energy through such major projects. This also contributes to realising the vision of our wise leadership led by His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, the directives of Your Highness, and the aspirations of His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, for a post oil era. Through this national landmark, which Emirati youth help grow every day, they are establishing a happy and prosperous society that will achieve the UAE Centennial 2071 objective of making our nation the best country in the world."

"His Highness's pioneering strategy launched in 2012 has markedly changed the progress of sustainability in the UAE and the region; extending its impact to the entire world. This was the UAE Green Growth Strategy under the theme 'A Green Economy for Sustainable Development.' The pinnacle of this journey was the launch of the Mohammed bin Rashid Al Maktoum Solar Park in 2012 by His Highness. Dubai adapted the Independent Power Producer (IPP) model to achieve industry-defining world records. These have reduced solar electricity tariffs for large solar projects and the world's biggest investments, to generate positive economic returns. The UAE Vision 2021, the Dubai Plan 2021 and the Clean Energy Strategy 2050 also support our focus on living in a world powered by clean and renewable energy."

"In Abu Dhabi, in June 2016, we witnessed the signing of the partnership agreement between DEWA and a consortium led



by Abu Dhabi Future Energy Company (Masdar) to implement the 800MW third phase of the Mohammed bin Rashid Al Maktoum Solar Park, which is being built in stages at the lowest Levelised Cost of Energy in the world of 2.99 US cents per kilowatt hour, using photovoltaic solar panels. Today shows the initial fruits of the combined efforts of DEWA, Masdar, and EDF, because there is more to come."

"The remaining stages of the third phase of the Mohammed bin Rashid Al Maktoum Solar Park are currently under construction to generate a further 600MW, for a total of 800MW by 2020. The total capacity of the photovoltaic and Concentrated Solar Power IPP-based projects is 1,500MW. After the inauguration of this leading milestone, solar power will now generate 4% of Dubai's total installed capacity."

"This solar plant is the first of its kind in the Middle East and North Africa, with an advanced solar tracking system to increase generation efficiency. It also uses unique technologies including over 800,000 self-cleaning solar cells that maintain a high-performance level. The project has been implemented with over 2.4 million accident-free man-hours. It will provide over 60,000 residences with electricity, reducing over 270,000 tonnes of carbon emissions every year," noted Al Tayer.

"The UAE's impressive progress in the field of renewable energy would not have been achieved without the vision of its leadership, which aims to strengthen the energy security of the country by building on the foundation of its hydrocarbon sector to create a diverse mix including conventional energy, renewables and nuclear energy," said HE Dr. Sultan Ahmed Al Jaber, UAE Minister of State and Chairman of Masdar.

"Masdar and Dubai Electricity and Water Authority have played an active role in enhancing the cost efficiency and productivity of renewable energy

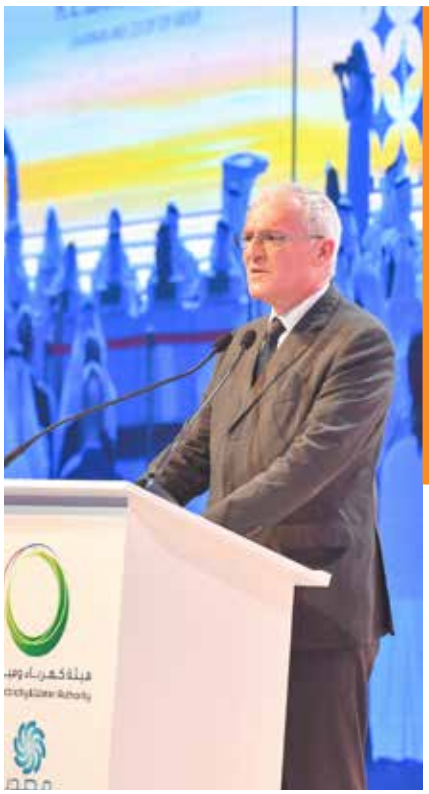
by deploying the latest advances in technology," Dr. Al Jaber added.

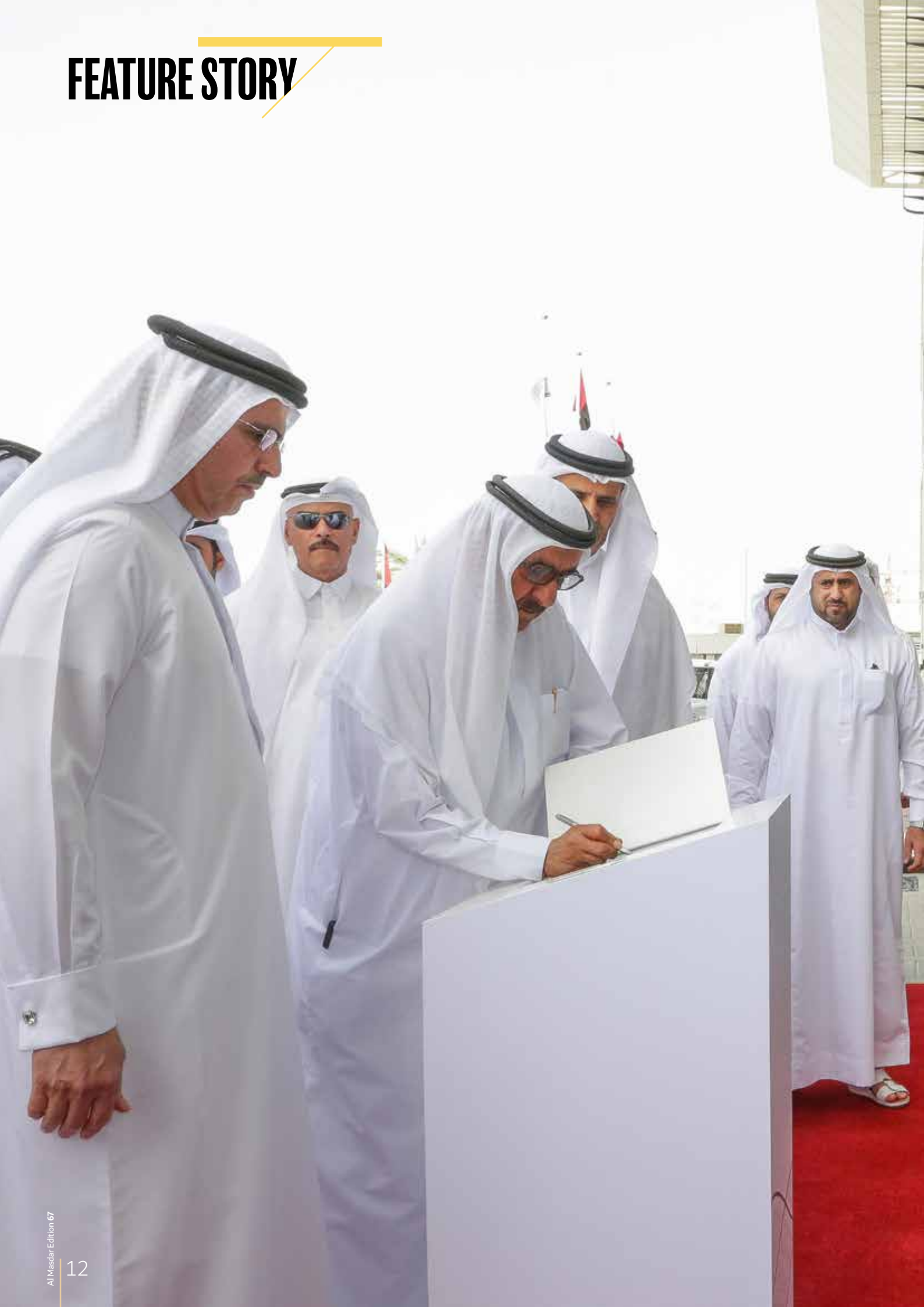
"Solar power complements conventional energy in a relationship that makes perfect economic sense in this region, given the number of clear sunny days in the year, by helping to reduce energy costs through peak saving."

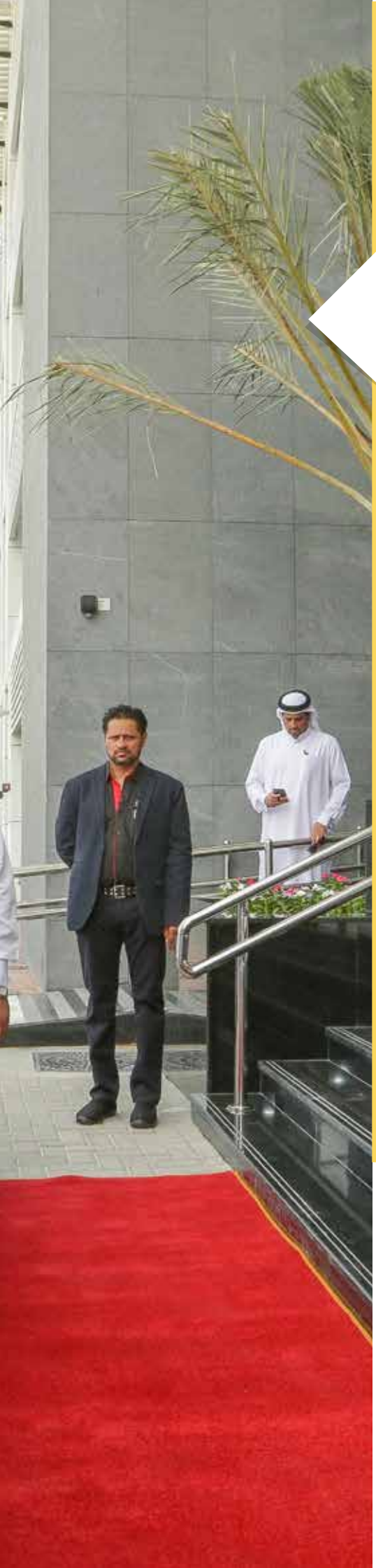
Dr Al Jaber further highlighted the critical role played by large-scale renewable energy projects in stimulating job creation and innovation in knowledge-based industries. He added that the major projects now underway in the UAE and Saudi Arabia showed that the region, which for years has led the way in the traditional energy sector, was now at the forefront of the development of renewable energy.

Dr. Al Jaber praised the efforts of all the teams involved in Shua'a Energy 2 from Dubai Electricity and Water Authority, Masdar, and EDF Energies Nouvelles, wishing them every success in the realisation of a strategic project for the UAE.

"It is a great honour for the EDF Group to contribute to the Emirate of Dubai's energy transition. I am delighted with the trusting relationship we have forged with our partners, DEWA and Masdar, to develop carbon-free energy in the region and beyond. The third phase of the Mohammed bin Rashid Al Maktoum Solar Park exemplifies the EDF Group's ability to execute large-scale solar projects, whilst contributing to the ambitions of the Group's CAP 2030 strategy: doubling its renewable capacities and tripling its international business outside of Europe by 2030," said HE Jean-Bernard Levy, Chairman and CEO of EDF Group.







HH Sheikh Hamdan bin Rashid Al Maktoum opens DEWA Campus for Occupational and Academic Development and witnesses graduation of 2nd and 3rd batches of DEWA Academy

HH Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of Dubai Electricity and Water Authority (DEWA), has inaugurated the DEWA Campus for Occupational and Academic Development in Al Hudaiba in Dubai. His Highness was welcomed by HE Matar Humaid Al Tayer, Chairman of DEWA; HE Saeed Mohammed Al Tayer, MD and CEO of DEWA; HE Saeed Al Kindi, as well as Majed Hamad Al Shamsi, Abdullah Mohammed Al Hashemi, and Hilal Khalfan Bin Dhaher, Board Members of DEWA. The opening ceremony was also attended by HE Ahmed Buti Al Mehairbi, Secretary General of the Dubai Supreme Council of Energy, and HE Saif Al Falasi, CEO of Emirates National Oil Company (ENOC).

HH Sheikh Hamdan bin Rashid Al Maktoum also witnessed the graduation of the 2nd and 3rd batches of DEWA Academy. A large number of officials, public figures, media personnel, students and parents were present.

HH Sheikh Hamdan bin Rashid Al Maktoum toured the campus, which includes 4 new four-storey buildings, houses a smart training and education centre for developing human resources, and DEWA Academy, which qualifies Emirati youth in technical, engineering, and occupational specialities as well as other technical fields. DEWA has established its campus for students to join all areas related to energy including electrical and mechanical engineering, maintenance, equipment operation, and renewable energy and sustainable energy. The new buildings include offices for staff, engineers, and trainers, training and lecture halls, workshops equipped with state-of-the-art technological and educational facilities, computer labs, an auditorium for educational activities, a multipurpose hall, an outdoor playground, and a library. It also includes a multi-storey car park. These facilities contribute to achieving the most benefits from the educational process and continuous practical training. This ensures quality education and graduating Emiratis who are capable of dealing with all challenges in the occupational and technical fields.

HH Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of DEWA, emphasised his commitment to enhancing the future of vocational and technical education in the UAE. "The DEWA Campus for Occupational and Academic Development is a milestone in vocational education in Dubai and the UAE. By establishing this advanced educational landmark, we aim to prepare young Emiratis academically and practically to occupy the technical and engineering jobs. This supports our efforts for the Emiratisation of these specialities and depend on Emiratis to meet the growing needs and ambitious expansion plans in the various strategic sectors. The campus is in line with the national efforts to support education and invest in Emirati talent to achieve the goals of the UAE Centennial 2071," said HH Sheikh Hamdan bin Rashid Al Maktoum.

HE Saeed Mohammed Al Tayer thanked HH Sheikh Hamdan bin Rashid Al Maktoum for inaugurating the DEWA Campus for Occupational and Academic Development, noting that this reflects the vision of the wise leadership, represented by HH Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, and HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime

Minister of the UAE and Ruler of Dubai, to strengthen the role of education in preparing the leaders of the future. Al Tayer emphasised that youth who excel in science and technology are the basis for creativity, innovation, ambition and development of civilisation and humanity.

"This academic landmark, which Your Highness inaugurated today, aims to enhance our efforts which are based on a clear strategy to empower young Emiratis and build their capabilities according to the best international standards in the technical, engineering, and vocational specialties which are needed in DEWA for the Emiratisation of these sectors, while meeting the needs of our ambitious expansion plans, to continue our leading role in meeting the needs of the Emirate in electricity and water services. The campus includes a training and smart education centre and DEWA Academy on a total area of 350,000 square feet. The campus can take up to 400 students and 600 trainees. These will be distributed in 13 training halls equipped with the latest tools and smart applications. The academy includes 12 classrooms, 3 laboratories and 12 technical and practical workshops. We work through our ambitious initiatives and development projects to raise the UAE's position as the best country in the world, and always rank first. DEWA has received over 170 prestigious local and international awards in the last three years. One of DEWA's most prominent awards was Leading Government Entity, at the 20th Dubai Government Excellence Program (DGEP) Awards 2017, according to the fourth-generation government excellence system. DEWA has received over a third of the Distinguished Government Entity Awards, since launching DGEP," said Al Tayer.

"We continued our achievements when DEWA won the highest award in the European Foundation for Quality Management (EFQM) Excellence Model, in the same year, with an excellent score between 750-800. DEWA is the first organisation outside Europe to receive this international award as a first applicant, and now ranks in the Platinum category. It is the only energy utility in this category. DEWA also won the Dubai Human Development Award and the Dubai Quality Award in the Gold category, in competition with the private sector. In addition, we were rated 'A' in Human Resources within the fourth-generation criteria of DGEP, and the gold category for Investors in People. We have adopted innovation in our vision and developed the pillar of the future, as well as the 10x initiative in our strategy to develop our work, in line with the requirements of the next phase. We also introduced the latest innovative technologies by adopting the Fourth Industrial Revolution and disruptive technologies including Artificial Intelligence (AI), Robotics, the Internet of Things (IoT), and Blockchain. We were the first government utility in the world to join as a partner for the Center for the Fourth Industrial Revolution of the World Economic Forum. DEWA launched its digital arm, Digital DEWA, which will implement a pioneering new model for utilities that uses innovation in renewable energy, energy storage, AI and digital services. This supports the 10x initiative, which aims to propel Dubai towards the future, making it 10 years ahead of other global cities through government innovation," added Al Tayer.

"DEWA works to consolidate the economic, social and environmental aspects of sustainability within an institutional framework and an integrated system to ensure sustainable results. DEWA joined the United Nations Global Compact (UNGC), the world's greatest corporate sustainability initiative. DEWA supports the UN Sustainable Development Goals 2030, and works on achieving 6 of them. DEWA is the first utility in the Middle East and North Africa to use the Global Reporting Initiative (GRI), to develop sustainability reports focused on the electricity sector. DEWA achieved a world record in the Sustainability Culture Indicator achieving 88.8% in 2017, which exceeds the global average of 62% achieved by the international participating entities during the same year. Your Highness, we promise to continue to work hard to achieve the highest positions for the UAE, and make it always rank first," concluded Al Tayer.

"As part of DEWA's commitment to consolidating its leading role as a national government organisation that contributes effectively to the building and development of the UAE and its citizens, DEWA Academy at the DEWA Campus for Occupational and Academic Development, provides opportunities for Emirati young people to acquire the technical skills required to enter the professional job market. It also equips students with other skills such as time management, planning, innovation and teamwork. Students who graduate from the Academy receive a high school diploma that is equivalent to the vocational diploma accredited by the Knowledge and Human Development Authority (KHDA) in Dubai. It is also accredited by the UK's Business and Technology Education Council (BTEC), according to the highest international standards. Over 30 million students in over 70 countries, including the UAE, register for the programme every year," said Dr. Yousef Al Akraf, Executive Vice President of Business Support and Human Resources at DEWA.

The duration of study at the DEWA Academy is three years. Students receive a monthly incentive. After graduation, they are guaranteed technical jobs at DEWA. From 2013 to 2018, DEWA Academy graduated 82 students. DEWA aims to graduate over 200 students from 2019 to 2021. DEWA Academy accepts students from 10th grade who have successfully completed 9th grade in high school, provided that the student's age is not less than 15 years and not more than 18 at the time of joining the Academy. Classroom density ranges from 20 to 24 students per classroom. During the workshops and lab classes, each class is divided into two groups.

DEWA wins largest number of main category awards at 21st Dubai Government Excellence Program

HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has presented Dubai Electricity and Water Authority (DEWA) with 6 awards at the 21st Dubai Government Excellence Program (DGEP) Awards. The Awards in the large government entities category included Dubai Giving, People-of-Determination-Friendly Government Entity, Best Entity in Customers' Happiness, and Best Entity in Innovative Administrative Initiative. In the Dubai Excellence Medals category, Sara Ali Al Zarooni, Distribution Occurrence Analysis Engineer, received the Dubai Medal for Best Field Employee, and Mohammad Javed Mohammad from the Administration department, received the Unknown Soldier Medal.

"On behalf of all DEWA staff, I extend my thanks and gratitude to His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, the leader of excellence and creativity that has advanced government work in Dubai to the highest international levels. We promise His Highness to continue our hard work, under the directives of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai, and our success and excellence. This supports the vision of our wise leadership to anticipate and shape the future, and harness creativity and excellence in DEWA's daily work; improving our performance, efficiency and services as much as possible. We work to keep pace with rapid technological developments by providing an encouraging environment to find the best creative solutions. I also thank both His Highness Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of DEWA, and His Highness Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, for their continuous support for government excellence in Dubai," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

"Receiving these awards in the Year of Zayed carries special importance as we recall the efforts of the late Founding Father, Sheikh Zayed bin Sultan Al Nahyan, and the late Sheikh Rashid bin Saeed Al Maktoum in making achievements and promoting government work in the UAE to the highest levels," added Al Tayer.

"Receiving the Dubai Giving, the People of Determination Friendly Government Entity award, and Best Entity in Customers' Happiness award, is a measure of DEWA's commitment to meet the needs of society to achieve the UAE Vision 2021, to build a cohesive society and preserved identity, and the Dubai Plan 2021 for Dubai to be a city of happy, creative, and empowered people who live in an inclusive and cohesive society. Receiving the Best Entity in the Innovative Administrative Initiative for the Independent Power Producer (IPP) initiative in DEWA's solar power projects, confirms the world-class results achieved by DEWA, which has set a new global standard by achieving world-class prices in solar power prices per kilowatt/hour. DEWA has attracted huge investments, resulting in massive cash inflows into Dubai and the UAE economy," concluded Al Tayer.

Al Tayer thanked DGEP officials and commended the award organisers, emphasising that the DGEP has helped to motivate government organisations and encourage them to adopt excellence and creativity to develop government work in Dubai to the highest international standards, to achieve the happiness of customers and society in general. He also thanks all DEWA staff for their continuous efforts.

FEATURE STORY

DEWA COMPLETES CONSTRUCTION WORK OF THREE SUBSTATIONS AT EXPO 2020

- AED 81 billion will be invested in Dubai's energy sector over the next five years.
- DEWA allocated AED 4.26 billion for Expo 2020 electricity and water infrastructure

DEWA has completed the construction work for the three substations at Expo 2020, as part of its ongoing commitments. DEWA completed the main infrastructure and energy projects to support Expo 2020 in a record time – two years before the official inauguration of the exhibition. This is in accordance with the highest standards of availability, reliability and efficiency, and supports DEWA's vision of becoming a sustainable innovative world-class utility. This is part of DEWA's efforts to achieve comprehensive sustainable development in Dubai and the UAE, and in line with the vision of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to host the best World Expo in Dubai in 2020. Expo 2020 will run from 20 October 2020 to 10 April 2021.

DEWA has allocated AED 4.26 billion to support the infrastructure for electricity and water at Expo 2020, as the official Sustainable Energy Partner. DEWA is building three 132/11 kilovolt (kV) substations with 45 kilometres (km) of high-voltage (132kV) cables. The total cost of the electricity transmission is AED 420 million. The substations are named Sustainability, Mobility and Opportunity after the three sub-themes of Expo 2020. DEWA will provide Expo 2020 with 422MW from the Mohammed bin Rashid Al Maktoum Solar Park to promote sustainability, which is a key pillar of the exhibition. DEWA is also building a smart grid to become the first network in

the world to provide the entire value chain of transmission and distribution systems for water and electricity to the Expo.

Mobility substation

In January 2018, DEWA inaugurated Mobility, the first 132/11 kV main substation, at Expo 2020 Dubai, with a conversion capacity of 150 MVA. Mobility is one of the substations responsible for generating electricity for the Expo 2020 Dubai. Construction began in July 2015, at a total cost of AED 173 million, comprising AED 80 million for the plant and AED 93.6 million for the 132kV cables.

Sustainability

In March 2018, DEWA inaugurated Sustainability, the second 132/11 kV main substation at Expo 2020 Dubai. It has a conversion capacity of 150 MVA. The total cost of the project is AED 103 million, including AED 83 million for the plant and AED 20 million for the 132kV cables.

Opportunity

In April 2018, DEWA inaugurated Opportunity, the 132/11 kV main substation at Expo 2020 Dubai. The substation has a conversion capacity of 150 MVA. The total cost of the project is AED 142 million, comprising AED 83 million for the plant, and AED 59.7 million for the 132kV cables.

"Expo 2020 Dubai gives great importance to Sustainability, making it one of its three pillars, along with Mobility and Opportunity. Our partnership with Dubai Electricity and Water Authority (DEWA) supports our commitment for Expo 2020 to be sustainable during its six-month period, and beyond. From here, we decided to generate the energy that Expo 2020 will use from renewable energy sources. Thankfully, DEWA decided to build three substations located close to the Expo site, and called after the main themes of Expo: Mobility, Sustainability, and Opportunity," said HE Reem Al Hashimy, Minister of State for International Cooperation and Director General of the Expo 2020 Dubai.

"We are proud of the national organisations that are dealing with Expo as a project for our beloved homeland. We all strive to make it a success with all our expertise and potential. We follow the approved plan to establish an Expo worthy of the UAE, and establish a legacy for future generations. Therefore, it is important to have everyone's cooperation; both citizens and organisations. This supports the Expo 2020 Dubai's theme, 'Connecting Minds, Building the Future,'" added Al Hashimy.

"As part of our partnership with Expo 2020 Dubai, as the official Sustainable Energy Partner, we intend to speed up the completion of our projects to provide sustainable energy to the facilities of the World Expo 2020. We also aim to achieve His Highness's vision to host the best World Expo in Dubai in 2020 and promote the UAE and Dubai's global position. DEWA continues to provide a distinctive energy infrastructure to meet all the needs of sustainable development in the Emirate, and provide electricity and water services, according to the highest standards of availability, reliability, and efficiency," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

Five-year investment strategy

"DEWA's strategy is to invest AED 81 billion over the next five years to meet the energy needs of the Emirate. This will strengthen the UAE's global competitiveness with a focus on green economy, by launching projects in clean and renewable energy infrastructure. This supports the Dubai Clean Energy Strategy 2050, which aims to make Dubai a global hub for clean energy and green economy and diversify the energy mix so clean energy will generate 75% of Dubai's total power output by 2050," added Al Tayer.

Al Tayer noted that DEWA works tirelessly to enhance infrastructure and its total production capacity, which is currently 10,413MW of electricity and 470 million imperial gallons (MIGD) of desalinated water per day. A further 4,000MW of energy production will also be built. DEWA has established 235 132/11 kV main substations as of the end of 2017. DEWA commissioned 15 of these substations in 2017, at a total cost of AED 1.67 billion. Up till 20 May 2018, DEWA inaugurated 15 major 132/11 kV conversion plants in Al Salal, Saih Shu'aib, Expo 2020, Al Warsan 1, Mohammed bin Rashid Gardens, Palm Jumeirah, Al Merkad, Nad Al Hammar, Business Bay, and Zabeel 2, at a total cost of AED 1.73 billion.

FEATURE STORY

DEWA enhances electricity and water infrastructure to keep pace with growing demand

DEWA has a modern infrastructure in accordance with the best international standards for the production, transmission and distribution of electricity and water. DEWA will invest AED 81 billion over the next five years to meet Dubai's energy and water needs. This supports a green economy and strengthens the UAE's competitiveness in clean energy and energy efficiency.

DEWA continuously works to increase its total installed capacity, which is currently 10,413MW of electricity and 470 million imperial gallons (MIGD) of desalinated water per day. DEWA provides electricity and water services according to the highest standards of reliability, efficiency, safety, and sustainability to support the ambitious development plans in various fields and meet the requirements of major projects being implemented in Dubai and the future needs of the economy, trade, tourism, industrial and real-estate sectors.

DEWA has six power plants in the Jebel Ali (D, E, G, K, L and M stations), and a station at Al Awir Power Plant (H Station), in addition to the Mohammed bin Rashid Al Maktoum Solar Park. DEWA aims to increase the total capacity of electricity by 2020 to about 14,085MW, including electricity generated from solar power. This supports DEWA's strategy to serve urban expansion and economic development plans in Dubai.

DEWA's plans include an increase of 700MW in the production capacity of the M Station in 2018, an increase of 590MW in the 3rd phase of the expansion of the K Station by 2019, establishing the fourth phase of the H Station with a capacity of 829MW by 2020, and adding 600MW of clean energy using the photovoltaic solar panels, and 300MW of concentrated solar power at the Mohammed bin Rashid Al Maktoum Solar Park by 2020. The plan also includes the inauguration of the 666MW first electricity production unit at the Hassyan clean coal power plant by 2020.

DEWA has a strategy to ensure that by 2030, 100% of desalinated water will be produced by a mix of clean energy that uses both renewable energy and waste heat. It is expected that, by 2030, Reverse Osmosis will help expand production capacity to 305 million gallons of desalinated water per day. This means reverse osmosis will produce 41% compared to its current share of 5%. Water desalination production capacity will increase to 750 million gallons per day by 2030, compared to the current capacity of 470 million gallons per day.

SUQIA LAUNCHES 'SUQIA ZAYED' TO PROVIDE DRINKING WATER DURING RAMADAN

Under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives (MBRGI), the UAE Water Aid Foundation (Suqia), launched the 'Suqia Zayed' initiative to provide clean drinking water at Iftar and mosque tents inside and outside the UAE. It also launched a campaign throughout the Holy Month of Ramadan to raise awareness on water scarcity that faces the needy around the world; who waste time searching for water, instead of attending to basic needs such as education, work, and taking care of the family and children. This is in celebration of the Holy Month of Ramadan, and in line with the objectives of the Year of Zayed.

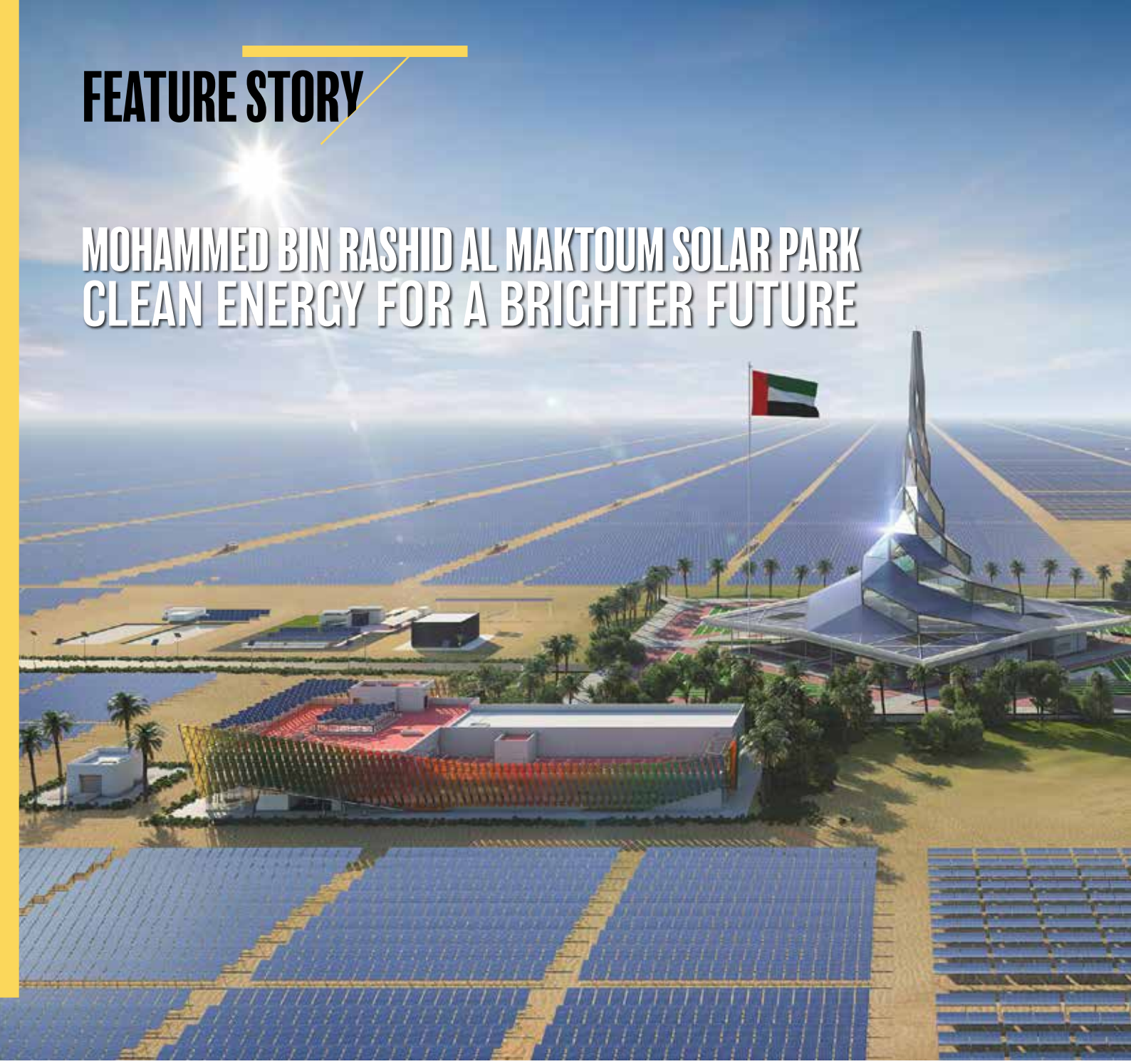
Suqia organised the Suqia Zayed initiative across the UAE, in partnership with Mai Dubai, and in cooperation with 14 charities, providing over 8 million water cups. The initiative extends to 13 countries, in collaboration with the Mohammed bin Rashid Al Maktoum Charity and Humanitarian Establishment. These include Uganda, Chad, Egypt, Brazil, Canada, USA, Palestine, Tunisia, Jordan, Ukraine, Bangladesh, Tajikistan and the Philippines.

"Suqia is committed to charity initiatives during the Holy Month of Ramadan. Suqia Zayed provides drinking water to the people fasting at Iftar tents and mosques inside and outside the UAE, throughout the month. The initiative reflects the spirit of the Year of Zayed, and the noble values and principles instilled by our late founding father, Sheikh Zayed bin Sultan Al Nahyan; mainly, investing in humans, wisdom and philanthropy. The initiative also reflects our commitment to implementing the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, for the sustainability of giving in the UAE. During the Year of Zayed, Suqia launched its Corporate Social Responsibility programme, which included 6 humanitarian projects and initiatives, in collaboration with DEWA and Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment," said HE Saeed Mohammed Al Tayer, Chairman of the Board of Trustees of Suqia.

"During the Holy Month of Ramadan, Suqia seeks to raise awareness about the problem of water scarcity around the world, and to highlight the suffering of women and children in areas where drinking water is available only at large distances, where mothers and children have to travel long distances for many hours on foot in search of clean water. Our efforts to provide drinking water to needy communities around the world and to find sustainable and innovative solutions to water scarcity reflects our commitment to support the United Nations Sustainable Development Goals 2030, namely, eradicating poverty and hunger, ensuring availability and sustainable management of water for all. It also supports our humanitarian and development work, and achieves one of the main objectives of the MBRGI, to combat poverty and disease," added al Tayer.

"Suqia strives to help those in need of clean water around the world and to develop sustainable and innovative solutions to water scarcity through research and development. This comes in line with our vision to provide clean and sustainable water with innovative solutions, and our mission to bring happiness to poor and afflicted communities by promoting investment in sustainable and innovative solutions through solar energy. This helps to provide clean drinking water, through building effective and sustainable partnerships, in line with best global practices. Over 8 million people in 25 countries have benefitted from Suqia's initiatives and sustainable development projects so far," said Mohammed Abdulkareem Al Shamsi, Acting Executive Director of Suqia.

MOHAMMED BIN RASHID AL MAKTOUM SOLAR PARK
CLEAN ENERGY FOR A BRIGHTER FUTURE



Despite being home to one of the largest oil reserves, the UAE prepares to bid farewell to the last barrel of oil, due to the vision of the wise leadership. Today, the UAE leads international efforts in clean and renewable energy, as a result of its strategies and investments. The UAE has established itself as a pioneer in the international energy sector, and has already launched world-class projects to diversify energy resources, with a focus on solar energy.

UAE Energy Strategy

The UAE Energy Strategy 2050 aims to develop an energy mix that combines renewable, nuclear and clean energy sources to balance economic requirements and environmental goals. By 2050, the UAE aims to invest AED 600 billion to meet the growing energy demand and ensure the sustainable growth of the country's economy. The strategy also seeks to increase the efficiency of energy use by individuals and organisations by 40%, and achieve savings of AED 700 billion by 2050.

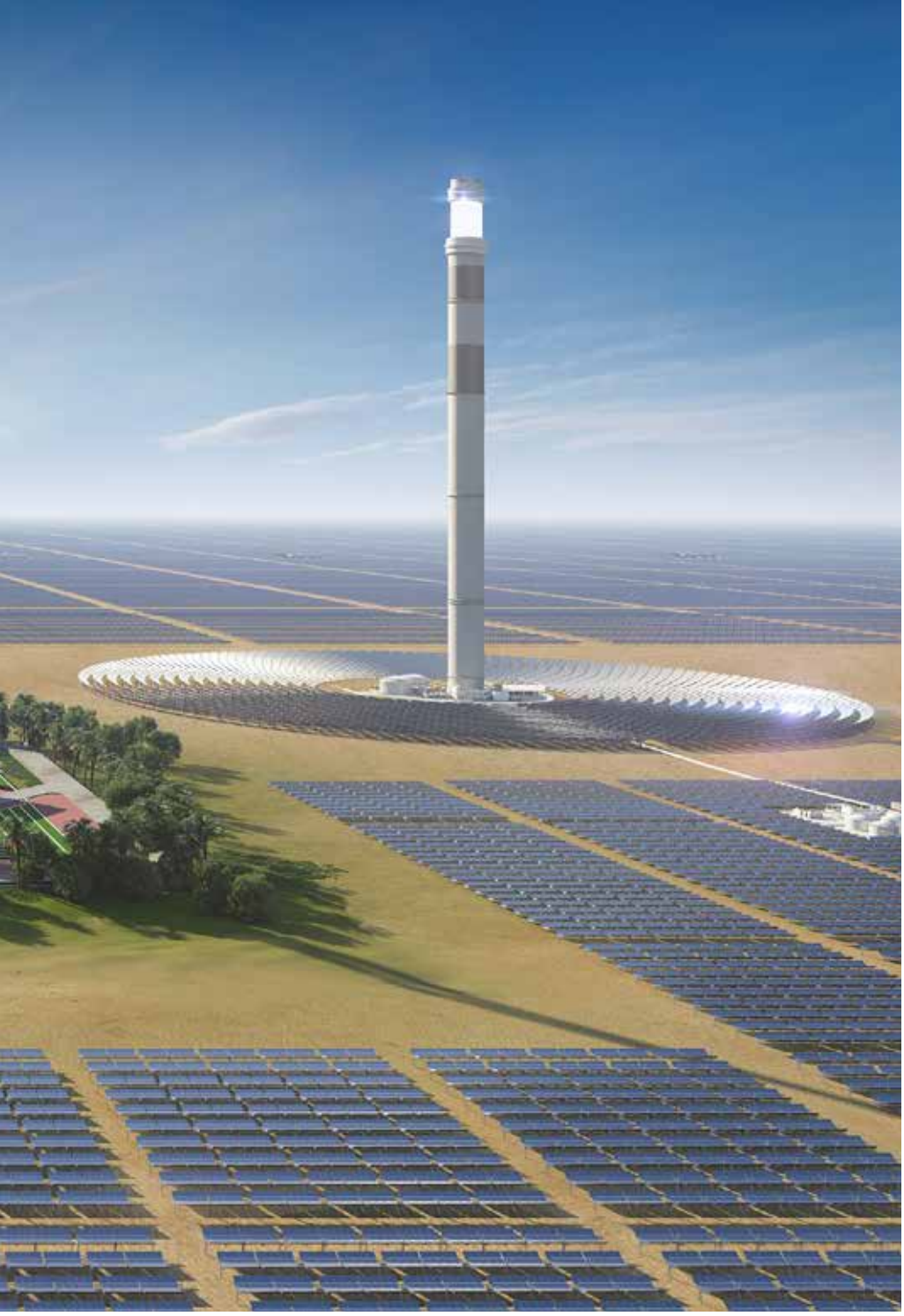
Dubai Clean Energy Strategy 2050

The Dubai Clean Energy Strategy 2050 aims to provide 7% of Dubai's total power output from clean energy by 2020. This target will increase to 25% by 2030 and 75% by 2050. The strategy consists of five main pillars: infrastructure, legislation, funding, building capacities and skills, and having an environmentally-friendly energy mix.

In January 2012, HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, launched the Mohammed bin Rashid Al Maktoum Solar Park. The solar park is using the Independent Power Producer model to generate 1,000MW by 2020 and 5,000MW by 2030, with total investments worth up to AED 50 billion. Upon completion, the solar park will reduce over 6.5 million tonnes of carbon dioxide emissions annually.

First Phase (photovoltaic solar panels)

The 13MW first phase became operational on 22 October 2013, and the project contributed to a major reduction of carbon emissions in adherence with the Clean Development Mechanism. The implementation of the first phase was an important step in achieving Dubai's objectives to diversify energy resources. The first phase is built up of about



153,000 photovoltaic cells, connected to 13 transformers in inverter buildings. The output is transformed to 33 kilovolts (kV), and generates 24 million kWh of electricity annually. The first phase contributes to an annual reduction of about 15,000 tonnes of carbon emissions.

Second Phase (photovoltaic solar panels)

On 20 March 2017, HH Sheikh Mohammed bin Rashid Al Maktoum inaugurated the 200MW second phase of the solar park. It is the largest and first project of its kind in the region's solar energy sector, based on the IPP model. The project was implemented through a partnership with the consortium led by ACWA Power from Saudi Arabia, and TSK from Spain, with an investment of AED 1.2 billion. The project provides clean energy to 50,000 residences in the Emirate, reducing 214,000 tonnes of carbon emissions annually. This phase installed 2.3 million photovoltaic solar panels over an area of 4.5 square kilometres. The efforts of Shuaa Energy 1, which was established by DEWA and the consortium led by ACWA Power and TSK, have been vital in completing the work efficiently and professionally, with 1.5 million Safe Man Hours without Lost Time Injury.

Third Phase (photovoltaic solar panels)

In June 2016, DEWA announced that the consortium led by Masdar was selected to build the 800MW third phase of the solar park. DEWA recorded a world record of USD 2.99 cents per kW/h for the IPP bid. The first stage of the third phase became operational on 1 May 2018. The remaining two stages will be operational in 2019 and 2020.

Fourth Phase (CSP)

On 16 September 2017, HH Sheikh Mohammed bin Rashid Al Maktoum announced the 700MW fourth phase of the solar park using Concentrated Solar Power (CSP). On 19 March, His Highness broke ground for the largest CSP investment project in the world with investments totalling AED14.2 billion. The project is being implemented by a consortium of Saudi Arabia's ACWA Power, The Silk Road Fund and China's Shanghai Electric. The consortium bid the lowest Levelised Cost of Electricity (LCOE) of USD 7.3 cents per kW/h. The project will have the world's tallest solar tower, at 260 metres.

Research and Development Centre

It is currently under construction and will be completed by 2020. The R&D centre will focus on four key operations: Producing electricity using solar power, Integration of Smart Grids, Energy Efficiency, and Water.

Solar testing facility

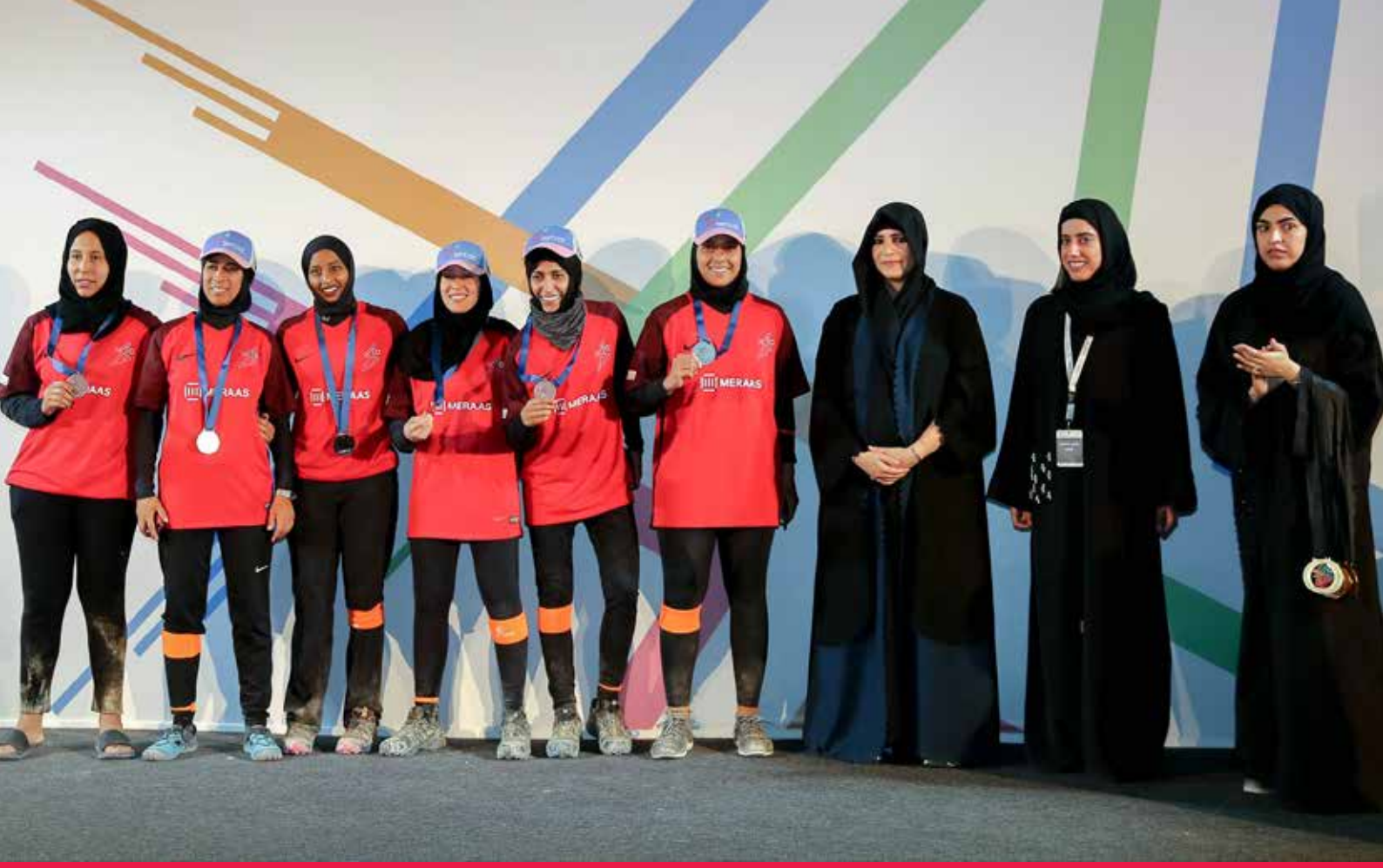
The solar park features two solar testing facilities: the first for testing photovoltaic solar panels, while the second focuses on CSP. The facility is currently testing 30 photovoltaic panel types from global specialist manufacturers to check the properties, analyse the results, and use them in research and development.

Innovation Centre

DEWA is working to develop an Innovation Centre, equipped with the latest renewable and clean energy technologies. Through this, DEWA aims to raise awareness on sustainability, while enhancing national capabilities and increasing competitiveness. DEWA's Innovation Centre will comprise four stories in addition to a ground floor, standing 90 metres tall. The Innovation Centre will be equipped with the latest clean and renewable energy technologies, and will serve as a museum and exhibition for solar energy.

Global interest in the solar park

The Mohammed bin Rashid Al Maktoum Solar Park has seen considerable interest from international developers since its launch. DEWA has also received a number of Expressions of Interest (EoI) from international organisations. This reflects the confidence of international investors in the projects that are supported by Dubai Government. Many global developers have expressed their desire to invest in development and implementation of the solar park, which contributes to providing promising opportunities in Dubai.



MD & CEO: DEWA's participation in Gov Games was powerful, committed and competitive

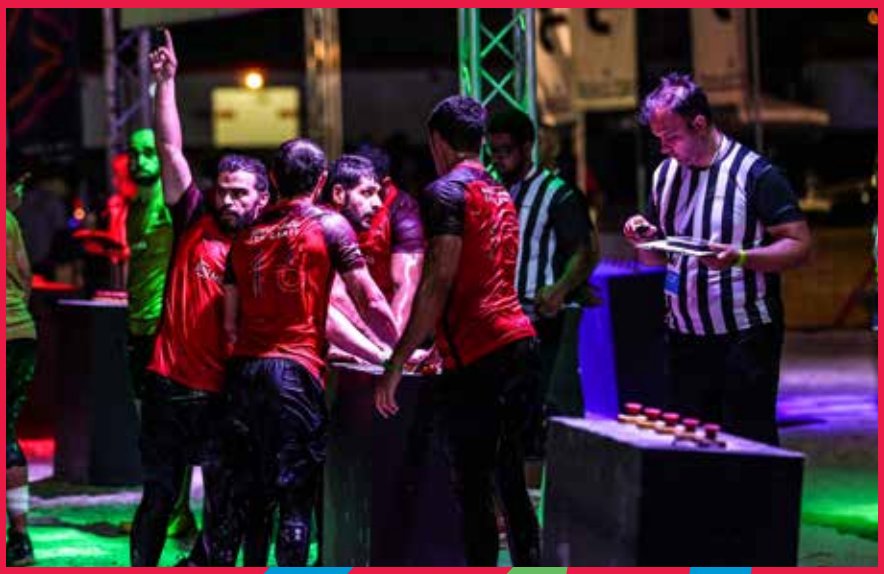
HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, expressed his appreciation at the high level attained by DEWA's female and male teams who participated in the Gov Games, launched by HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, Chairman of the Dubai Executive Council and Chairman of Dubai Sports Council. The games were held under the theme "One Team. One Goal" and aimed to promote creative collaboration and reinforce team spirit among government employees. DEWA's female team topped all the participating government entities and ranked second in the competition.

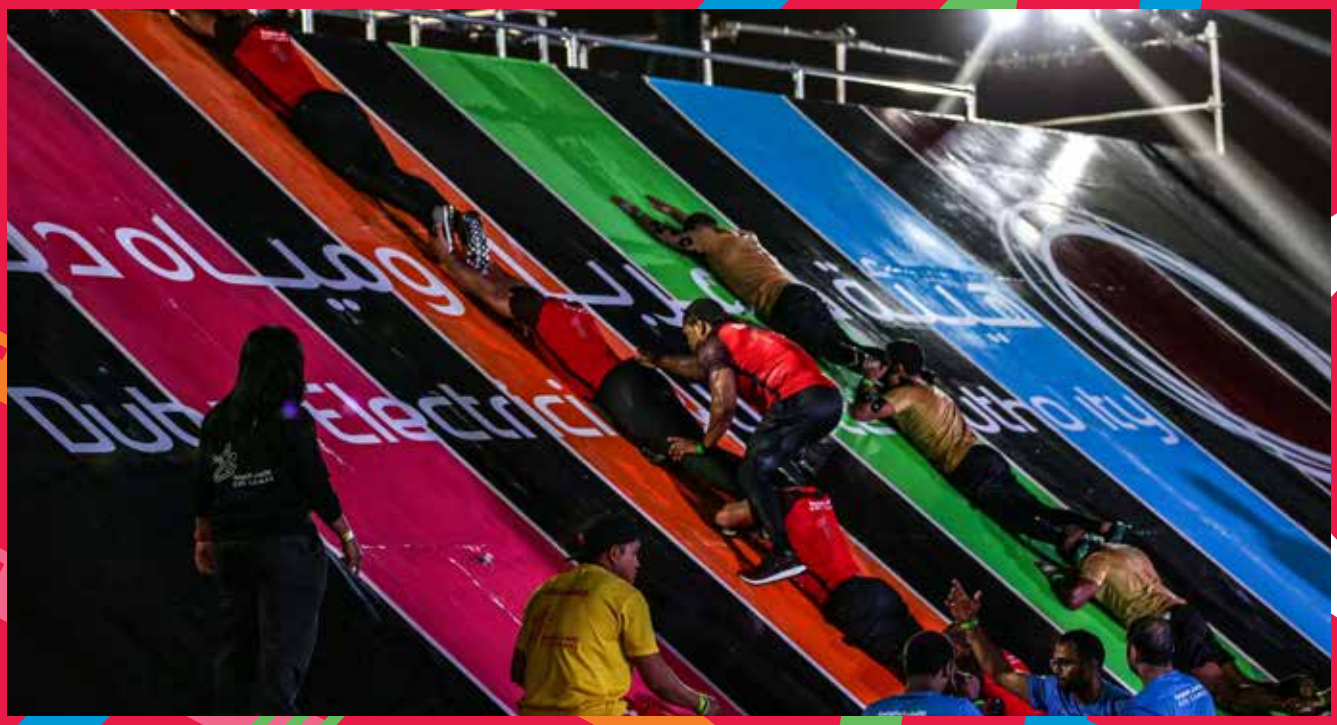
Al Tayer expressed his gratitude to HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum for launching this initiative, the first of its kind in the world to reinforce a set of principles and rules in government workplaces through creative and innovative sports competitions. "HH Sheikh Hamdan bin Mohammed is used to launching creative initiatives that promote the well-being of society and ensure a healthy lifestyle. The Gov Games follows the great success of the 'Dubai Fitness Challenge' that had wide participation from the corporate sector and society. It succeeded in promoting physical activities and commitment towards exercising for 30 minutes daily for 30 days. Our participation in the Gov Games is part of our commitment to promote team work and maintain the spirit of sports among DEWA's employees. DEWA's participation in Gov Games was powerful, committed and competitive," Al Tayer said.

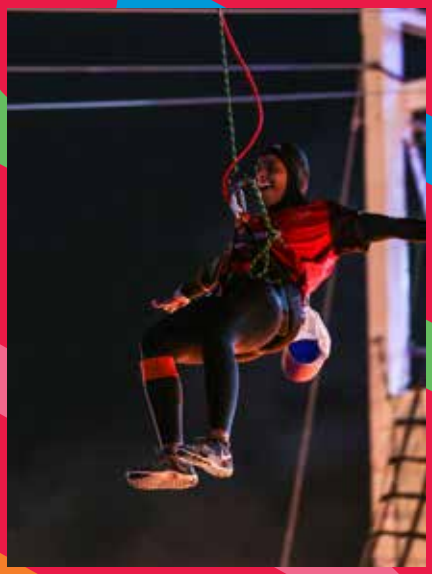
"We are excited to participate in such a sports festivity to raise awareness on the importance of following a healthy lifestyle, and continuous exercise. As HH Sheikh Mohammed bin Rashid Al Maktoum said: 'Sports teach determination, teamwork, respect for rules, and fairness with our opponents.' It achieves His Highness's vision to make Dubai the happiest city in the world by boosting healthcare and providing a healthy lifestyle for healthy creative individuals, which is in line with the Dubai Plan 2021 to make Dubai a home for creative empowered happy people." Al Tayer added.

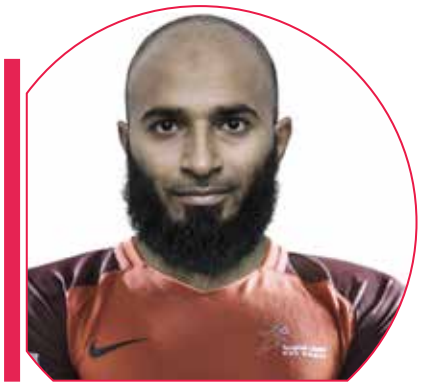
DEWA's female team included Sara Alfalasi, Nada Omar, Suad Sultan, Fatima Abdullah, Rawdha Al Mansouri, and Raouia Hamiche; while the male team included Mana Al Doubi, Faisal Al Saleh, Omar Alkhaja, Malik Jumaan, Walid Yari and Mohammad Aldanbra.

DEWA team members expressed their gratefulness to HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, for launching this initiative and thanked DEWA's top management for its support. They stated that their participation was a source of pride on the individual and team levels.



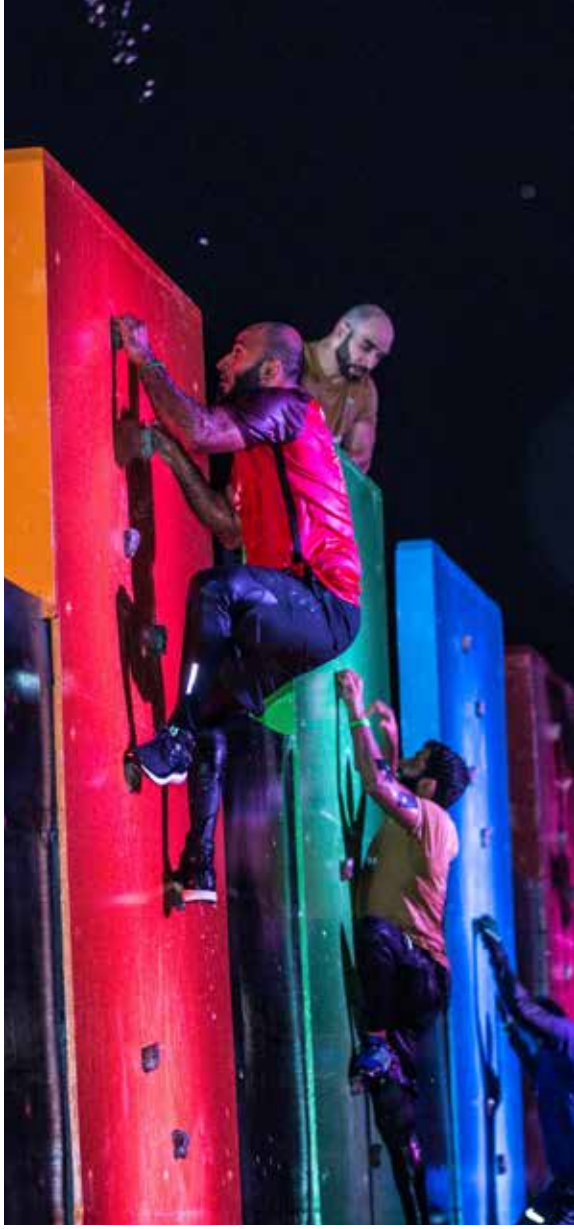






There are no limits to my career and sports ambitions, and DEWA encourages me to achieve them

MANA ALDOUBI

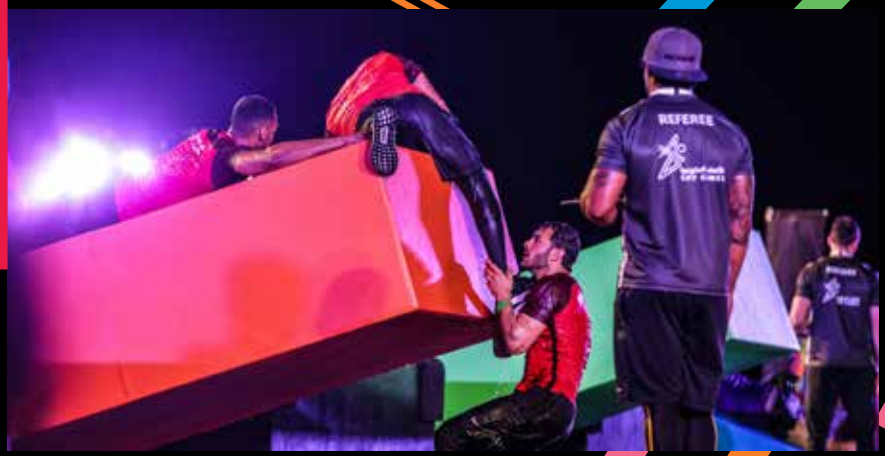


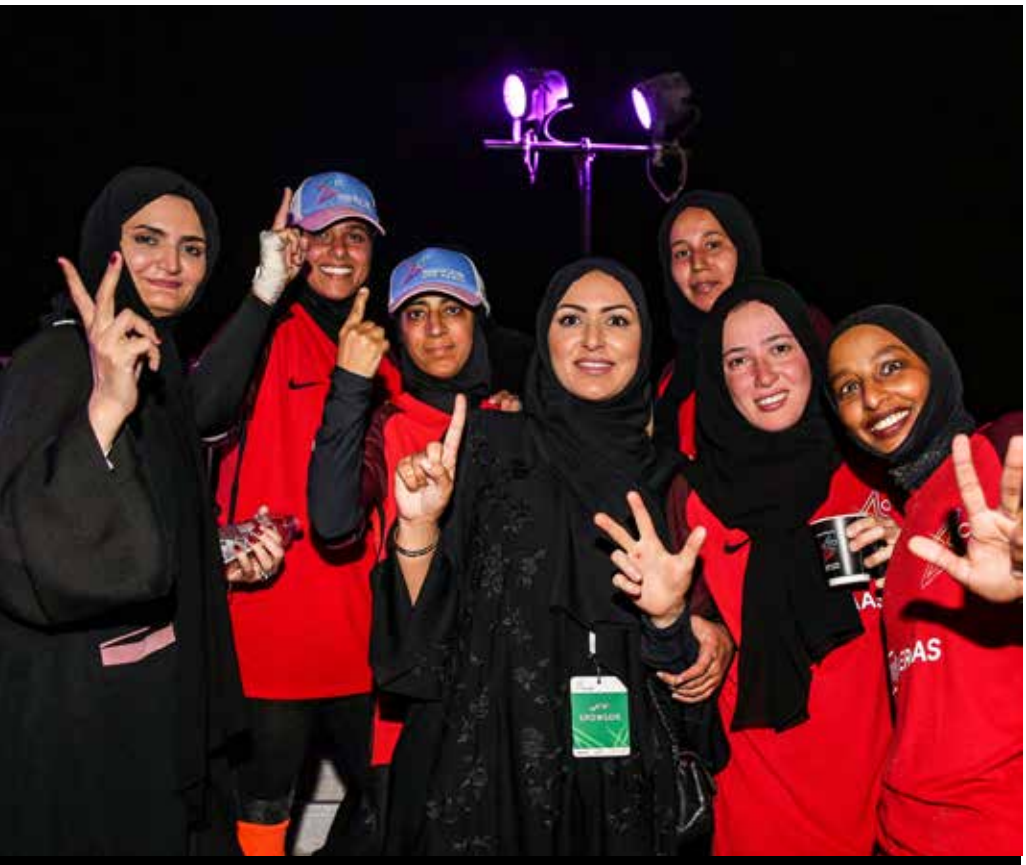
Mana AlDoubi, Cross Fit champion and leader of DEWA men's team participating in the Gov Games: There are no limits to my career and sports ambitions, and DEWA encourages me to achieve them

Mana trains twice a day; first at 6 am in a sports club for one hour before work begins and then at the end of the day. This daily sport routine is reflected in his professional performance. Mana AlDoubi was the leader of DEWA men's team at the Gov Games. Graduating in 2003, Mana joined DEWA where he works in operations for the Generation division for 5 years and is currently a Senior Manager.

"My passion for sports with my schoolmates started at an early age, and before joining DEWA I was a football player. I played for Al Shaab in 2002 in the UAE Pro-League as a left back. After I stopped playing football, I took up Cross Fit, which is a US Marine sport. This has spread internationally and locally on a large scale, among the sports community. It is an individual game combining aerobics, weight lifting, gymnastics and others. In 2017, I participated in the Kuwait Championship for Cross-Fit and won the 12th place in the Middle East. I also participated in the Sharjah Gulf Championship 2016, and this year I will participate in Kuwait, Bahrain and Egypt Championship," said AlDoubi.

"I have been representing DEWA in many competitions such as Spartan Race and other endurance competitions in the last 3 years. I also represented DEWA in football in the government and Ramadan competitions for 4 years and we won the first place in two government championships," added AlDoubi.





I play all sports and participate in individual and group tournaments

SARA ALFALASI

Sara Alfalasi, multi-sport athlete, and leader of DEWA Women's Committee who participated in the Gov Games: I play all sports and participate in individual and group tournaments

Sarah Hamid Alfalasi chose to study civil engineering. She graduated from the University of Sharjah in 2013, and immediately joined DEWA as a project engineer in the water and civil sector.

Alfalasi grew up in a family heavily involved in sports; her father loved sailing and boat races. The children were thus inspired by all sports reflecting positively in their education and athletic distinction. During her university years, Alfalasi was a role model for her academic excellence and physical fitness, during which time, she and her colleagues established the women's university team.

Alfalasi aspired to reach the professional level and joined Sharjah Club in 2008, and represented Al Nasr Club in basketball, participating twice in the Gulf Championship. As part of the DEWA team, she then took part for two consecutive years in the Shaikha Hind Women's Sports Tournament.

"At the recent Gov Games, 70 female teams participated and we finished second in the qualifying round. In the finals, we got a total of 84.5 points, which bagged us the second place among the participating government teams," said Alfalasi about the female team from DEWA and their participation in the Gov Games.

حكومة دبي
GOVERNMENT OF DUBAI

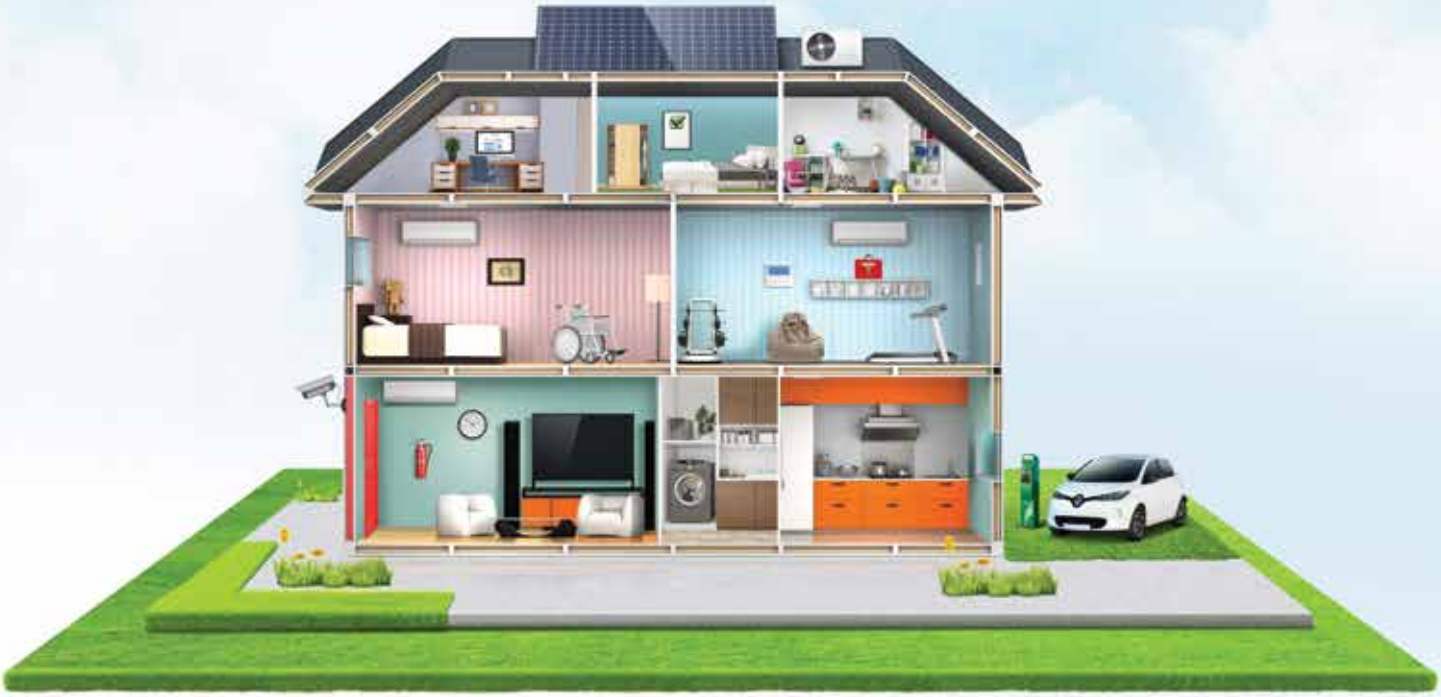
عام زايد YEAR OF ZAYED

هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

Ideal Home

Our happiness begins with happy and sustainable homes

Ideal Home is a pioneering public initiative to show families the best possible practices for an ideal, happy and sustainable home environment. 9 government entities are working together to deliver this initiative.



Find out the best ways to make an ideal home

Register

Register now on the e-training course as part of the Ideal Home initiative, available on DEWA's website: www.dewa.gov.ae Even better this is completely free.

Test your knowledge

Improve your knowledge about sustainability, health and safety, environment, indoor-air quality, security, social responsibility, smart adoption, emergency preparation and respect UAE residential laws. Take the test to be the best!

Pass successfully

Once you complete the online course and pass the exam with an overall score of 90%, you will receive a certificate from DEWA. Your home will be safer, sustainable and secure for you and your family.

To register and for more information, visit: www.dewa.gov.ae

Ideal Home initiative's partners:

DEWAOFFICIAL

customercare@dewa.gov.ae | www.dewa.gov.ae

EXPO 2020 DUBAI UAE

OFFICIAL SUSTAINABLE ENERGY PARTNER

Our Vision
A sustainable innovative world-class utility

P.O. Box 564, Dubai, United Arab Emirates
T: +971 4 601 9999, F: +971 4 601 9995

NEWS

MD & CEO reviews annual report of DEWA's Youth Council

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, welcomed members of DEWA's Youth Council to review the council's annual report, one year after its establishment. During the meeting, Al Tayer commended the initiatives and programmes launched by the Council. He praised their efforts to enhance direct communication between the youth and DEWA's higher management, empower youth and get them involved in the sustainable development journey.

"The achievements of DEWA's Youth Council, according to the annual report, support our belief that young citizens have the required capabilities and expertise to help DEWA achieve its ambitious visions and plans. We look forward to benefitting from their potentials, skills, and views. Through DEWA's Youth Council, we intend to provide our youth with the necessary means to properly direct their creative ideas in a manner that serves DEWA's vision to become a sustainable innovative world-class utility," said Al Tayer.

Fatima Mohammed Al Jokar, President of DEWA's Youth Council, briefed Al Tayer on the Council's achievements in 2017, including the 'Youth Circle', the launch of an e-campaign to encourage youth to present their innovative ideas through Afkari platform titled 'Youth 10x'. The Council, in cooperation with the UAE Water Aid Foundation (Suqia), under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives, contributed from its project budget for the provision of clean water supply and installation of water meters to homes in Upper Egypt.

DEWA Youth Council was the first youth council to participate as a strategic partner for the UAE's celebrations during World Youth Day. The Council also contributed to the Youth Dialogue that was concurrently held for the first time with the World Green Economy Summit 2017, as well as youth sessions during health, safety, and the environment forums, in addition to the Emirati Women's Day Forum. The Youth Council also launched its first policy to support and empower youth, and enhance DEWA's strategic objectives towards good governance. DEWA also launched the first comprehensive database of all youth statistics and data at DEWA.

DEWA signs MoU with Amity University Dubai on renewable energy, smart grids and emerging technologies

Dubai Electricity and Water Authority (DEWA) signed a Memorandum of Understanding (MoU) with Amity University Dubai to promote the exchange of knowledge, best experiences and practices on renewable energy, smart grids and emerging technologies. This is part of DEWA's efforts to enhance cooperation with academic institutions.

The MoU was signed by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, and Dr Ajit Kumar Nagpal, Chairman and Director General of the Amity University Middle East Initiative.

The MoU aims to strengthen cooperation between DEWA and Amity University, and exchange knowledge and conduct academic and applied research and studies. This will develop the renewable and alternative energy sector in fields such as energy analysis and planning support; support planning to analyse resources in support of renewable energy generation; and technical, economic and environmental analysis of the alternative future energy scenarios, with consideration of interrelated energy, water and land use issues. The MoU also includes Energy Systems Integration which focuses on grid integration of inverters with related testing and standards, and analysing, modelling, simulation and testing of the effect of smart grid measures on grid performance, and energy storage to support high penetration renewable energy deployment and electric vehicle integration.

The MoU also covers solar photovoltaics by expanding ongoing efforts to help improve the reliability of solar cells and modules including related testing and evaluation. It will also study the soiling and dust impact on performance of photovoltaic systems. The fourth clause of the MoU looks at the energy efficiency: system-wide energy efficiency in electricity generation and use.

The MoU also aims to enhance knowledge share in emerging technologies such as data analytics, robotics and drones, 3D printing, material testing, manufacturing techniques, soiling analysis, and energy efficiency measures in buildings through architectural and construction based design solutions.

The MoU also includes that Amity University will provide support and training for DEWA's students through scientific specialised programmes with the supervision of both parties. This is aligned to DEWA's strategy to build the capacity of its Emirati workforce to the highest standards, and empower them with the needed skills and experience to lead the future of energy, water, and sustainable development for Dubai.

DEWA emphasises role of media in consolidating sustainability and spreading conservation awareness

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, has emphasised the key role that the media plays in highlighting environmentally-friendly practices that contribute to achieving sustainable development and the acceleration of the shift to a green economy. Al Tayer made these remarks during DEWA's participation as Sustainability Partner in the 17th Arab Media Forum (AMF), organised by Dubai Press Club. AMF was organised on 3rd and 4th April 2018, in Madinat Jumeirah, Dubai under the theme 'Impactful Media Trends'.

"DEWA participated as the Sustainability Partner in the Arab Media Forum, building on the strong ties between DEWA and Dubai Press Club, and out of appreciation for the role of the media in raising awareness on the issues that affect people's lives. Sustainability is a key issue that contributes to enhancing social, economic and environmental development. The forum is an opportunity to connect with Arab and international media organisations. It also provides an interactive platform for media professionals to spread meaningful messages that address sustainability, for which our wise leadership attaches great importance," said Al Tayer.

"The media plays a key role in supporting and enhancing sustainability and spreading a culture of the rational use and conservation of natural resources. This is done by introducing society members to the principles of responsible and sustainable consumption of resources, and spreading awareness on the best eco-friendly practices, and the importance of conservation of energy and water to make conservation an essential part of people's daily lives," said Al Tayer.

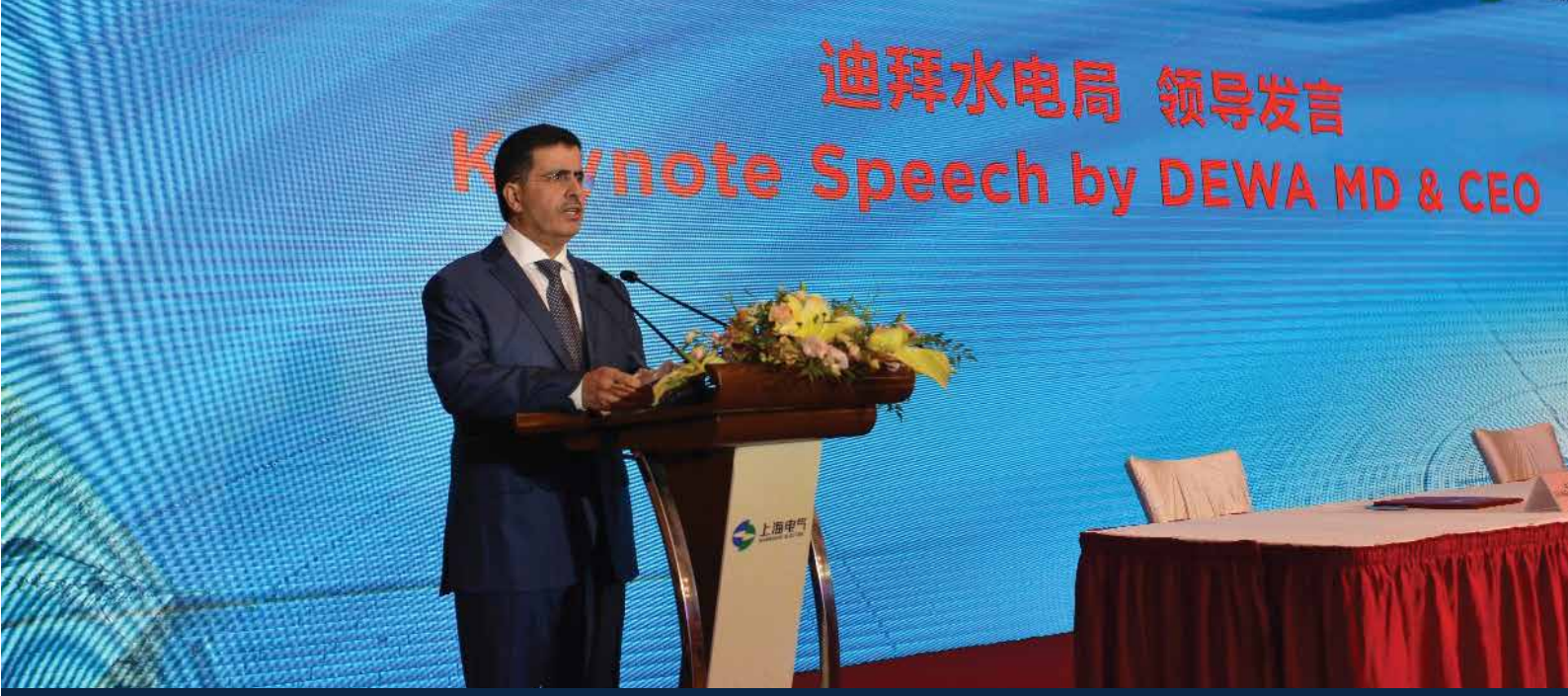
Many sessions were organised at the 'Beta Stage – DEWA' hall at AMF. These included 'The Transformational Arm of Regional Media', presented by Dr. Ali Al-Nuaimi, Editor-in-Chief of Al Ain news portal; 'Facebook: Changing the Media Landscape' presented by Patrick Walker, Director of Media Partnerships, EMEA at Facebook; 'Building a Stronger Future for News' by Carlo Biondo, President, EMEA Strategic Partnerships at Google; 'Engaging the Audience in a Digital Era' presented by Peter Greenberger, Global Director of News Partnerships at Twitter; 'Vision of Media in a New Middle East' presented by Dr. Mamoun Fandy, Director of London Global Strategy Institute; 'Defining Soft Power in the Arab Media' presented by Dr. Fawaz Gerges, Professor of International Relations at London School of Economics & Political Science; 'Media and the Fear of Change' presented by Sultan Al Qhtani, Editor in Chief of Riyadh Post, and 'Quality Digital Journalism' presented by Matt Cooke, Head of Google News Lab International.

Delegation from World Bank and global energy companies reviews Dubai's experience in developing CSP projects

A high-level delegation that includes 25 officials, experts, and specialists from the World Bank, energy companies and international utilities, visited the Mohammed bin Rashid Al Maktoum Solar Park in Dubai to learn about Dubai's experience in developing leading photovoltaic and Concentrated Solar Power (CSP) projects.

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, emphasised that DEWA is committed to sharing its expertise in implementing major solar energy projects, notably the Mohammed bin Rashid Al Maktoum Solar Park, which is the largest single-site solar project in the world based on the Independent Power Producer (IPP) model. The 213MW photovoltaic first two phases are already operational. The 800MW photovoltaic third phase and the 700MW CSP fourth phase are currently under construction. The AED14.2 billion fourth phase is the largest single-site CSP project in the world and will feature the world's highest solar tower, reaching 260 metres, and will be commissioned in stages, starting from Q4 of 2020.

The delegation visited the Solar Testing Centre at the solar park, which includes test technologies for photovoltaic panels and for CSP as well. The delegation thanked DEWA for giving them the opportunity to review its experience in developing leading photovoltaic and CSP solar projects.



MD & CEO witnesses signing of EPC Contract between ACWA Power & Shanghai Electric

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA witnessed the signing of the Engineering, Procurement, and Construction (EPC) contract for the 700MW fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park, the largest Concentrated Solar Power (CSP) investment project in the world based on the Independent Power Producer (IPP) model. The contract was signed between Saudi Arabia's ACWA Power and China's Shanghai Electric, the project's main contractor, at the Radisson Blu Plaza Xingguo hotel in Shanghai, China.

The contract was signed by Mohammad Abdullah Abunayyan, Chairman of ACWA Power, and Cao Min, President of Shanghai Electric. The ceremony was attended by HE Dr. Ali Obaid Al Dhaheri, UAE Ambassador to China, HE Turki Al-Madi, Saudi Arabia Ambassador to China, Zhou Bo, Executive Vice Mayor of Shanghai Municipality, Zheng Jianhua, Chairman- Shanghai Electric Group, in addition to representatives from Chinese banks and financial institutions, the media, and officials from DEWA, ACWA Power, and Shanghai Electric.

"I am pleased to be here in Shanghai for the signing of the engineering, procurement, and construction (EPC) contract for the 700MW fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park, the largest Concentrated Solar Power (CSP) investment project in the world. We are here today to show the strong ties between our two great nations, which have been formed because of our shared values and our trading and economic interests. Bilateral trade between the United Arab Emirates and the People's Republic of China has already exceeded (USD) 35 billion dollars in the first nine months of 2017," said Al Tayer in his speech during the signing ceremony.

"signing ceremony is an important milestone that supports the directives of the wise leadership represented by His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the United Arab Emirates, and His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, to achieve the objectives of the UAE Centennial 2071, the UAE Vision 2021, and the Dubai Plan 2021 to secure a happy and better future," added Al Tayer.

"On March 2018, His Highness Sheikh Mohammed bin Rashid Al Maktoum gave the sign to commence the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world, based on the Independent Power Producer model. This marks considerable progress in our efforts to achieve the Dubai Clean Energy Strategy 2050 to provide 75% of Dubai's total power output from clean sources by 2050. This will transform the Emirate into a global hub for clean energy and green economy; and consolidate its global position as the city with the lowest carbon footprint in the world," he added.

"The Mohammed bin Rashid Al Maktoum Solar Park has a planned capacity of 5,000MW by 2030, with a total of 13.6 billion dollars (AED 50 billion) in investments to accelerate our diversification to clean energy. It is a key pillar in our strategy, considering that our ambitious targets require at least 42,000 MW of renewable energy by 2050."

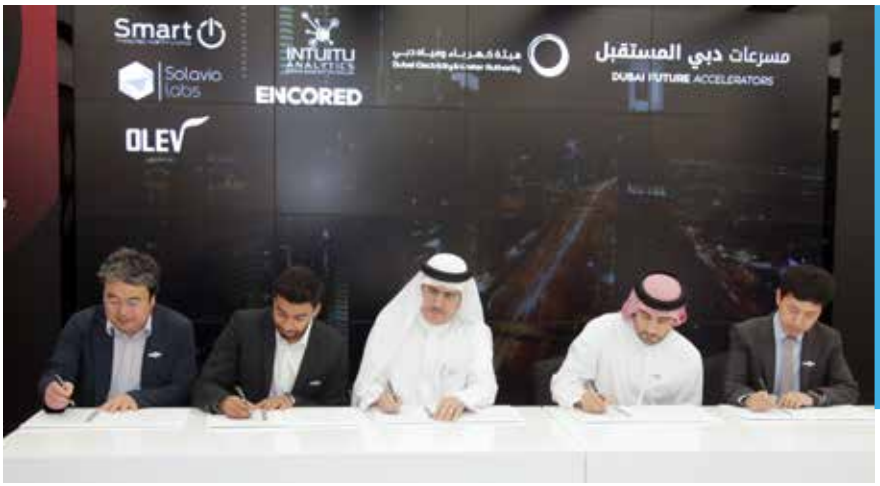
"I would like to use this opportunity to thank everyone, especially our partners in the consortium, comprising Saudi Arabia's ACWA Power and the Silk Road Fund, and China's Shanghai Electric as main contractor, for all their work on the fourth phase of the solar park."

"This project will feature the world's tallest solar tower, measuring 260 metres, with the world's largest thermal energy storage capacity. It will provide clean energy to over 270,000 residences in Dubai, reducing 1.4 million tonnes of carbon emissions a year. The CSP project will use two technologies to generate clean energy: the 600MW parabolic basin complex and the 100MW solar tower, and they will cover 43 square kilometres. This project involves an investment of 3.9 billion dollars (AED14.2 billion), and has achieved the world's lowest Levelised Cost of Electricity (LCOE) of USD 7.3 cents per kilowatt hour (kW/h) for Concentrated Solar Power."

"In Dubai, we welcome every opportunity to share experiences and best practices to help achieve this goal, and further strengthen our ties. Let us show the world today that the United Arab Emirates and China are committed partners in clean energy so that the planet continues to work to achieve a brighter, sustainable future, for generations to come," concluded Al Tayer.

DEWA signs MoU with 3 start-ups at 4th Dubai Future Accelerators Programme

HE Saeed Mohammed Al Tayer, MD & CEO of Dubai Electricity and Water Authority (DEWA) witnessed the signing of Memorandums of Understanding (MoU) with three start-ups to work with them in the 4th Dubai Future Accelerators Programme. The Programme is organised by the Dubai Future Foundation, with the theme 'One Team Co-Creating the Future.' It aims to strengthen the UAE's position, enhance its role as a leading hub for shaping the future, and make it a platform to test solutions and technologies that shape a better tomorrow for humanity.



Through its participation in the Dubai Future Accelerators programme, the largest accelerator programme in the world, DEWA aims to continue to explore and develop innovative and sustainable solutions to its challenges. DEWA has selected three start-up companies based on the future challenges. The MOUs aim to strengthen cooperation to find innovative solutions in Artificial Intelligence (AI), electrical load control and the Internet of Things (IoT). The MoU also aims to transform the DEWA office at the Dubai Future Accelerators premises in Emirates Towers, into a smart office based on IoT, as well as test the two self-cleaning devices for solar power panels.

DEWA has participated in the three rounds of the Dubai Future Accelerator Programme, which concluded with 11 MoUs and 5 innovative pilot projects. DEWA is currently working on the completion of 6 new projects related to its services and its digital transformation and smart infrastructure.

DEWA tackles climate change by generating Certified Emission Reductions and Renewable Energy Certificates

Dubai Electricity and Water Authority (DEWA) announced that the 200MW second phase of the Mohammed bin Rashid Al Maktoum Solar Park has the potential to issue almost 400,000 International Renewable Energy Certificates (I-RECs) in 2017 in line with the I-REC Standard. These I-RECs are equivalent to 400,000 megawatt hours of clean energy and contribute to the reduction of 170,000 tonnes of carbon emissions. I-RECs are an important choice for buyers of green power, as they serve as the currency for renewable energy markets. They can be bought and sold between multiple parties and can be used to claim that renewable electricity was produced to meet the electricity demand they create.

The Thermal Energy Storage and Turbine Inlet Air Cooling (TESTIAC) system in Jebel Ali has the potential to generate 7,865 Certified Emission Reductions (CERs) in line with the United Nations Framework Convention on Climate Change (UNFCCC)-backed Clean Development Mechanism.

Dubai Carbon Centre of Excellence (Dubai Carbon) issued the I-RECs associated with the I-REC standard for the 200MW second phase of the Mohammed bin Rashid Al Maktoum Solar Park as the local I-REC issuer. Registered as CDM projects, both are the first of their kind to be approved by the UNFCCC. The UNFCCC registered the 200MW second phase of the solar park as a CDM project on 12 October 2015 with the potential of generating carbon credits for an initial term of 7 years. The TESTIAC Project was registered on 14 November 2012, with the potential of generating carbon credits for a total of 10 years.

DEWA opens registration for 2nd Solar Decathlon Middle East in Dubai

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA announced that registration is now open for the second Solar Decathlon Middle East (SDME). SDME was created through an agreement between the Dubai Supreme Council of Energy, DEWA, and the United States Department of Energy. Dubai will host the first two rounds of the Solar Decathlon. The first in November 2018, and the second in 2020. Prizes for the two competitions total over AED20 million. The announcement was made at the Second International Workshop, which DEWA organised for the 18 teams from 13 countries that are participating in the first round of the competition. The workshop was attended by HE Dr Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, HE Paul Malik, US Consul General in Dubai, HE Ahmed Buti Al Muhairbi, Secretary General of the Supreme Council of Energy, Richard King, Founder of the Solar Decathlon Competition, Najeeb Al Ali, Executive Director of Dubai Expo 2020 Bureau, Dr Edwin Rodriguez, SDME Manager, and officials, researchers, and former participants of the Solar Decathlon.

Organised by DEWA, the three-day workshop was attended by 18 teams from 13 countries. The team members met with the organising committee for the last time before the actual competition. Participants learned about the competition rules, assessment mechanisms, health and safety conditions, and other criteria that must be met in the homes that students will build during the competition. The teams presented miniature modules of the homes that will qualify in the competition. Team members visited the competition site of over 60,000 square metres at the Mohammed bin Rashid Al Maktoum Solar Park.

The shortlisted teams for the final phase of the 1st competition includes: The 'Know Howse' team from the University of Sharjah and the University of Ferrara in Italy aim to rediscover a new dimension of the concept of living in a small, comfortable home that achieves environmental goals through rational resource consumption. The 'ORA' team from Heriot-Watt University Dubai aims to provide UAE homes with an innovative, flexible design using locally available materials that contribute to reducing greenhouse gas emissions and energy costs. The New York University Abu Dhabi team aims to experience new kind of agricultural tourism in the UAE with the use of traditional architectural elements. The 'Jeel' team from the American University of Dubai aims to design a unique life experience using innovative and eco-friendly technologies. The 'Al Bayt Al Kamel' team from the American University of Ras AlKhaimah is reviving the lifestyle of Gulf countries by providing a new contemporary interpretation of home spaces and traditional building technologies. The UOW team from the University of Wollongong in Australia and in Dubai is working on designing an innovative and sustainable home for old people to improve their quality of life, while providing intelligent solutions that enhance energy efficiency. The Aqua Green team from Ajman University promotes a comfortable lifestyle through the use of functional interiors, and smart and efficient appliances that are efficient to save and conserve energy. The KSU team from King Saud University, which includes students from different majors seeking to provide affordable and attractive solar homes. The SoLLite Salalah team from the Dhofar University, Oman, is designing an environmentally-friendly home that conserves natural resources, produces energy and adapts to the climate in the region. The 'BaityKool' team from the University of Bordeaux, France, and Amity University in the UAE, aims to build a house that has a courtyard and open spaces, the basis of its eco-friendly design is that humans can live closer to nature. The 'EFdeN' team from Ion Mincu University of Architecture and Urbanism, the Technical University of Civil Engineering in Bucharest of Romania, and the Birla Institute of Technology & Science from

the UAE, aim to build a sustainable house that provides a completely-new living experience with a model that can easily adapt to lifestyles due to its flexible design. The FutureHAUS team from Virginia Tech, USA aims to design and build modular structures that integrate smart technologies, energy-efficient systems and adapts to changing lifestyles. The 'HAAB' team from Gabriele D'Annunzio University of Chieti-Pescara, Italy, Pisa University and the University of Naples in Italy, aim to develop a design that combines the needs of well-being and of sustainability with optimal utilisation of natural resources and ease of use by People of Determination. The Sapienza SDME team from Sapienza University of Rome, Italy, aims to highlight smart homes that are highly-efficient, solar-powered, comfortable, attractive and affordable. The 'VIRTUe' team from Eindhoven University of Technology, Netherlands aims to use a human-centred design which focuses on the surrounding environment and changes the perception of sustainable urban living. The TDIS team from the National Chiao Tung University of Taiwan includes students and researchers in the field of innovation who seek to design smart green buildings that contribute to creating a greener future. The 'MizanHome' team from the Universiti Teknologi and Universiti Sains Islam in Malaysia`, consisting of students, academics and professionals with different skills and expertise, are committed to sustainability and promoting the responsible use of energy via the design of a fully solar-powered, net zero-energy building. The 'Twist Box' team from the University of Belgrade, Serbia seeks to use multidisciplinary techniques to achieve healthier lives in areas with rapid climate change and scarce resources.

Solar Decathlon Middle East aims to encourage participating teams to design, build and operate sustainable models of solar homes that are cost-effective and energy-efficient, with a focus on environmental conservation and climate considerations. The teams compete in 10 different areas including: architecture, engineering and construction, energy management, energy efficiency, rest conditions, home function, sustainable transport, sustainability, communication and innovation.

Students can register for the Solar Decathlon Middle East 2020. For details, go to: http://www.solardecathlonme.com

TEAMS
Solar Decathlon Middle East 2018

SoLLite Salalah

A smart and easy to operate house. It adapts to different environments and can be extended horizontally and vertically with changes in its functions. The design contributes to public education and dissemination of knowledge in solar energy, and uses eco housing technologies.

JEEL

The living experience provided by JEEL, together with the innovative and eco-friendly technologies are anticipated to raise the popularity of such net-zero building units. This will contribute to their mass-production locally and globally in the near future.

KSU

A multidisciplinary team that brings together a number of KSU's best minds. The team aims to help people realise the full potential of solar-energy-powered, affordable, attractive houses.

Twist Box

The Twist Box, designed for the desert, provides a new, sustainable, adaptive space by twisting and understanding contemporary and traditional building systems. It redefines the perception of traditional housing to address challenging conditions which prevent people from accessing clean water, power supply or efficient ventilation.

EFdeN

The team aims to improve the building sector by creating a prototype of a sustainable house that adapts to different climatic conditions. It provides a new living experience which can adapt easily to different lifestyles and cultural needs thanks to its flexible design.

BaityKool

Baitykool's design with a 'Fena' courtyard to maximise the openings and protect the architecture from the hot climate. The courtyard is its green heart, where humans live close to nature. The house is also designed to be adaptable on a larger scale.

NYUAD

The team envisions a new kind of agricultural tourism experience in the UAE. Their design brings together best global practices, unobtrusive use of technology, and modern interpretations of traditional architectural elements.

Aqua Green

The team's design promotes comfortable living through functional interiors, smart and efficient appliances. This maximizes energy savings and minimises consumption, using environmentally-friendly appliances and material, recycled water, and exterior plants to reduce solar reflections.

ORA

ORA ORGANIC / RESILIENT / ADAPTIVE PROTOTYPE

The aim of the project is to provide an innovative design for an adaptive sustainable house that makes use of local materials and reduces energy use. The module design is interactive with the user to offer the best environmental performance aligned to the user's individual needs.

Al Bayt Al Kamel

Al Bayt Al Kamel revives the lifestyle of the Arabian Gulf countries by proposing a contemporary interpretation of home spaces and traditional building technologies. The courtyard is the most important feature of the home for its different functions, which create comfort conditions.

MizanHome

The team is committed to the idea of sustainability, providing energy-efficient solutions, as well as raising awareness about promoting the responsible use of energy via the production of a fully solar-powered, net zero-energy, modular, climate responsive, affordable, and balanced-designed home.

TDIS

TDIS is trying to reach further progress in green energy research and green architecture design. It is committed to research and development, industry-academia collaboration and promotion of applied research by way of architectural buildings, comprising different fields such as substantial materials, architectural systems and smart living.

VIRTUe

VIRTUe aims to raise awareness about sustainability within the built environment by using a human-centered design and creating an attractive product which changes the perception of sustainable living. Instead of building a new sustainable neighborhood at the border of the city, the team wants to improve a neighborhood that is already there.

Sapienza SDME

The team is committed to promoting sustainable development by promoting architecture capable of meeting the needs of all stakeholders, present and future. It demonstrates how high performance solar homes can be comfortable, attractive, affordable and smart.

HAAB

HAABitat team is designing a solution which combines the needs of well-being and sustainability, while meeting usability, accessibility and safety standards. The project ensures the optimal use of natural and energy resources during the building's life cycle, with the financial feasibility, construction flexibility and usability of the living spaces for all including users with special needs.

FutureHAUS

Our goal is to design and build modular structures that integrate smart technologies, energy efficient systems, and new materials. This house adapts to changing patterns of life and work. The long-term research goal is to make buildings more efficient, more accessible, more livable, and more beautiful.

know Howse

Know-Howse is an educational programme that aims to increase environmental awareness by rediscovering a new dimension of 'living small but comfortably'. The prototype house is a test-unit extracted from a broader housing development that combines occupants' comfort with environmental goals such as reducing land-use and resource consumption.

Desert Rose
Team UOW
Australia - Dubai

UOW

Team UOW is committed to addressing the demands of the changing society by creating 'A House for Life'. Their goal is to build an innovative and sustainable home for aging populations to improve their quality of life. The team develops smart solutions within the built environment to maximise energy efficiency and innovation to obtain design and construction excellence.

MD & CEO presents DEWA's work on innovation and sustainability to UK Energy Industries Council

HE Saeed Mohammed Al Tayer, MD & CEO of Dubai Electricity and Water Authority (DEWA), gave a keynote speech in the plenary session about DEWA's work on innovation and sustainability at The Energy Industries Council Conference, which is organised by the UK Energy Industries Council (EIC) at the Dusit Thani Hotel in Abu Dhabi. The plenary session included HE Dr Matar Hamed Al Neyadi, Undersecretary of Ministry of Energy and Industry, HE Philip Parham, British Ambassador to the UAE and Stuart Broadley, Executive Chairman of the UK Energy Industries Council. The conference included an exhibition to show innovative technologies, products and services, the current and future opportunities in the energy sector. It has involved companies and suppliers from Britain and the United Arab Emirates.

"I would like to thank the UK Energy Industries Council (EIC) for organising this conference and for this invitation to present Dubai's experiences in increasing renewable and clean energy share and contributing to the advancement of the UAE's sustainable development. The UAE and the UK have strong economic, strategic and cultural ties. These strong relations were established by the late Sheikh Zayed bin Sultan Al Nahyan, the Founder of the UAE, may his soul rest in peace. In 2018, we celebrate the Year of Zayed, which marks 100 years since his birth. The mutual relations between our two countries are closer today than ever before under the wise leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA in his speech.

"The UAE is Britain's top Arab trade partner, and its 11th largest international trade partner, with trade exceeding 20 billion US dollars. There are 120,000 British expatriates living in the UAE and 1.5 million British tourists per year. Thousands of Emiratis travel to the UK to visit, work or study at its distinguished universities and academic centres. This has encouraged leading British companies to undertake major projects and join over 5,000 British companies operating in the UAE, and we hope this number will continue to grow. The UAE has established strong ties with the UK in various fields such as trade, investment, energy, climate change, culture, education, health, sports, international development and foreign relations. The UAE has become a global model for sustainable development, based on the vision of our wise leadership, who is shaping the future to get ready to export the last barrel of oil. We are doing this by implementing quality projects to increase our share of renewable energy within our energy mix," said Al Tayer.

"To achieve our vision to become a sustainable innovative world-class utility, Dubai Electricity and Water Authority (DEWA) has aligned its strategy to the UAE Centennial 2071, the UAE Vision 2021, the Dubai Plan 2021, the Dubai Clean Energy Strategy 2050, the Demand-Side Management Strategy 2030, the UAE Green Growth Strategy and other relevant strategies. DEWA, as a provider of electricity and water, has an integrated

value-chain from planning, generation, transmission, distribution to delivering the best customer services. We are working to provide the finest government services with the highest levels of efficiency, reliability and availability, to achieve the highest happiness rates of our stakeholders. However, the journey is a continuous one. DEWA is serving over 800,000 customers. Its assets exceed 144 billion Dirhams and our investments will amount to 81 billion Dirhams over the next five years to meet growing demand for electricity and water in the Emirate," continued Al Tayer.

"The results of DEWA's efforts were excellent, by all standards. Many processes for development and improvement have been introduced to the production and operational processes to raise efficiency and reducing costs. One of DEWA's major projects is the Mohammed bin Rashid Al Maktoum Solar Park, which is the largest single-site solar park in the world. It will produce 5,000 MW by 2030, at a total investment of 50 billion Dirhams. Upon completion, the solar park will help reduce over 6.5 million tonnes of carbon emissions per year."

"We've adopted the Independent Power Producer (IPP) model to enhance public-private partnerships. Through this model, we have reached the lowest international prices. DEWA has over 4,000MW of IPP projects underway, in partnership with the private sector at a total investment of 30 billion Dirhams," explained Al Tayer.

DEWA has made many local and international achievements. The UAE, represented by DEWA, ranked first in the world in getting electricity in the World Bank's Doing Business 2018 report. DEWA's global achievements confirm the success of its effective and sustainable practices in improving energy efficiency on both supply and demand. DEWA succeeded in reducing Electricity Line Losses from 7% to 3.3% and Unaccounted for Water from 42% to 7.1% and these are global benchmarks. Customer Minutes Lost reached 2.68 per year compared with 15 minutes for leading utilities in Europe and the USA. The fuel efficiency of DEWA's latest power plants increased to about 90%. The generation efficiency increased by 28.86% from 2006 to 2017. These achievements stem from DEWA's efforts to ensure excellence in all its operations.

"Innovation is part of DEWA's corporate strategy. DEWA has worked to create innovative solutions that produce great results, saving both time and effort. We are keeping pace with the 4th Industrial Revolution, and adopting Artificial Intelligence (AI), Robotics and the Internet of Things (IoT) technologies to support the Dubai 10X initiative, which is set to propel Dubai into the future for a better future, for generations to come.

We launched a new initiative that reforms the concept of service organisations and creates a new digital future for Dubai through Digital DEWA, the digital arm of DEWA. DEWA Digital will enable us to apply a pioneering model for service organisations based on innovation on its four pillars of renewable energy, storing energy, AI, and digital services," added Al Tayer.

"In Dubai we are always interested in discovering developments in international technology to further broaden our horizons and team up with international partners in clean and renewable energy and exchange the best practices and expertise in innovative technology to improve our services. I am sure there is much that British companies can offer in the UAE. Finally, in the Year of Zayed, and with the determination of the people of Zayed, we will continue our focus on sustainable development, to make the UAE a key global player in sustainable development." concluded Al Tayer.

DEWA is Smart Water Company of the Year in 2018 Global Water Awards

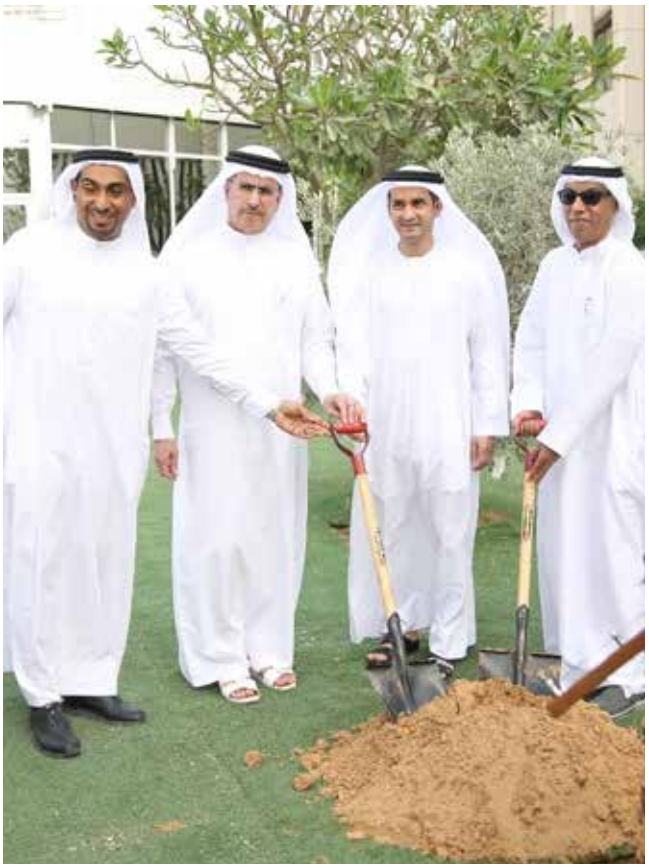
DEWA won the Smart Water Company Award of the Year at the Global Water Awards, during a ceremony held at the Global Water Summit 2018. The Summit took place recently Paris, and was attended by over 650 experts, specialists and senior officials of public and private water companies and organisations around the world. Abdullah Obaidullah, Executive Vice President of Water and Civil at DEWA, received the award on behalf of HE Saeed Mohamed Al Tayer, MD & CEO of DEWA.

The award recognises DEWA's efforts to implement one of the biggest advanced infrastructure projects for smart water meters in the world. DEWA succeeded in replacing 518,000 mechanical meters with smart meters in a record time, of which 300,000 are monitored and read every 15 minutes. This allowed DEWA to improve the availability of meter readings to 99.9%.

Al Tayer expressed his happiness for DEWA's global recognition, among the leading and most advanced service providers in the world, for the smart transformation of its operations and services.

DEWA has demonstrated exceptional internal capabilities through the development and maintenance of advanced infrastructure of smart water meters, replacing fiber-based solutions with internally developed automated solutions, in addition to creating four operational data sheets for smart network management, contributing to savings of about AED 5.2 million. In addition, DEWA has succeeded in remote controlling built-in smart meters to identify and handle 12,000 water leaks, 3,600 faults and 800 overload cases, resulting in total savings of approximately AED 32 million.

DEWA organises Earth Day 2018 activities



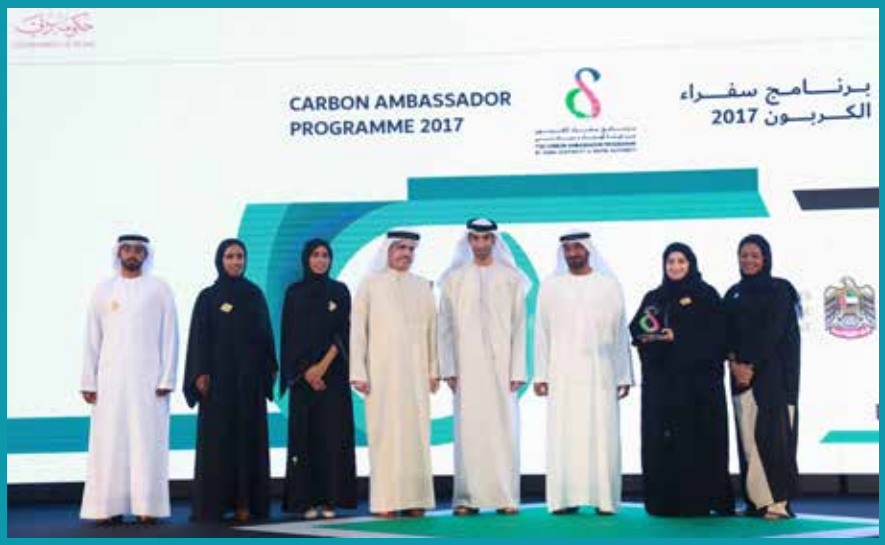
DEWA organised several activities to mark Earth Day, which is observed on 22 April every year. This year's event is under the theme 'Ending Plastic Pollution'. HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, and DEWA's Executive Vice Presidents and Vice Presidents took part in the activities, which included planting palm trees at DEWA's head office. This was inspired by the values of The Year of Zayed and the principles established by the late Sheikh Zayed bin Sultan Al Nahyan. Internal activities also included a documentary about the dangers that face the environment and a stand showing activities of DEWA's climate change ambassadors, in addition to raising awareness about the importance of recycling plastic bottles. DEWA also organised a voluntary day to clean the beaches of the Jebel Ali Marine Sanctuary from plastic waste, in cooperation with Dubai Municipality and the Emirates Marine Environment Group (EMEG). A large number of DEWA staff and the public took part in the activity. This is part of DEWA's strategy to protect the environment and limit climate change.

DEWA updates strategy for 2021

DEWA organised a workshop to review its strategy for 2021. The workshop, which was held under the theme 'Zayed's Legacy for a Sustainable Future' was attended by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, Executive Vice Presidents, Vice Presidents, DEWA's experts, and staff.

"Our strategies and initiatives are aligned with government plans and strategies, including the UAE Centennial 2071, which is a long-term government plan to prepare the UAE and young Emiratis for the future; the UAE Strategy for the Fourth Industrial Revolution aims to strengthen the UAE's position as a global hub for the Fourth Industrial Revolution; the UAE Vision 2021; the Dubai Plan 2021, the Dubai Clean Energy Strategy 2050, and other inputs support the transition to a sustainable green economy in Dubai and the UAE," said Al Tayer.

Al Tayer noted that DEWA regularly reviews its strategy to keep pace with developments. This contributes to DEWA's competitiveness and its excellence in developing long-term proactive plans, keeping pace with the Fourth Industrial Revolution, and making use of disruptive technologies to achieve the vision of the wise leadership to become the government of the future. Al Tayer thanked all the divisions for their efforts to improve DEWA's excellence to the highest levels and urged them to continue the path towards excellence to achieve the vision of the wise leadership and enhance DEWA's role in anticipating and shaping the future of energy and contributing to a brighter, more sustainable and happier future, for generations to come.



DEWA honours Conservation Award winners 2017-2018

In the presence of HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Supreme Council of Energy in Dubai; HE Hussain bin Ibrahim Al Hammadi, Minister of Education; and HE Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, HE Saeed Mohammed Al Tayer, MD & CEO of DEWA announced unprecedented results from the 12th Conservation Award (2017-2018). The results include savings of 92GWh of electricity and over 133 million gallons of water, and reducing 43,000 tonnes of carbon emissions, equivalent to financial savings of about AED 46 million.

This was in recognition of the winners of the 12th Conservation Award, organised by DEWA, in partnership with the Ministry of Education and the Knowledge and Human Development Authority (KHDA) in Dubai. The ceremony was held at Palazzo Versace Hotel, in Dubai. It was attended by HE Dr Abdullah Al Karam, Director General and Chairman of the Board of Directors of KHDA, a number of senior officials from several government departments of Dubai, senior DEWA and KHDA officials, faculty members, heads, and students from educational institutions in Dubai.

Al Tayer noted that during this award for 2017-2018, the participating educational establishments achieved unprecedented results in rationalising consumption, manifested in the provision of 92 GWh of electricity and over 133 million gallons of water. This has helped reduce over 43,000 tonnes of carbon dioxide emissions, equivalent to financial savings estimated at about AED 46 million.

HH Ahmed bin Saeed Al Maktoum, attended by Al Tayer, honoured the Minister of Education and Dr Al Karam, followed by the winners of the four categories.

In the Distinguished Education Institution in Conservation category, for nurseries and kindergartens, Al Fadeelah Kindergarten won from the public sector, and Al Arqam School from the private sector. For elementary schools, Ahmad Bin Salim Primary School won from the public sector, and and Gems Modern Academy won from the private sector. For Middle schools, Omar Bin Al Khattab Primary for Boys won from the public sector, and Emirates International School (Meadows) won from the private sector. For high schools, Al Shaarawi High School won from the private sector, and the Indian International School - Dubai Silicon Oasis, won from the private sector. Neither centres for people of determination, nor universities and colleges won in this category. In the Distinguished Conservation Leader category, the winners were Abdulbaset Mohammed Al-Abdullah, Principal of Al Shaarawi High School from the public sector, and Githa Morali, Principal of the Indian International School - Dubai Silicon Oasis, from the private sector.

In the Distinguished Conservation Team category, for nurseries and kindergartens, the winners were Al Baraa Nursery team, from the public sector, and Millennium School team, from the private sector. For elementary schools, the winners were Al Hudaibia Primary School, from the public sector, and Dubai National School from the private sector. For Middle Schools, the winners were Al Lusaily High School for Boys & Girls, from the public sector, and The Central School, from the private sector. Al Noor Training Centre won in the category of the teams for centres for people of determination. In the Distinguished Conservation Project category, Dubai International Academy won in high schools, and Amity University in universities and colleges. In a special tribute to the most energy-efficient educational facilities, DEWA honoured the Mohammed bin Rashid School, Swiss International Scientific School, and The Westminster School in Dubai.

HH Ahmed bin Saeed Al Maktoum, attended by Al Tayer, honoured the top three projects in the third Carbon Ambassadors Programme. HE Dr Thani bin Ahmed Al Zeyoudi, received a tribute to the role of the Ministry of Climate Change and Environment in supporting the Carbon Ambassadors Programme as a strategic partner. DEWA launched the Carbon Ambassadors Programme, with the support of the United Nations Development Program (UNDP) and in cooperation with the Dubai Carbon Centre for Excellence (Dubai Carbon). The Ministry of Climate Change and the Environment came first, the Roads and Transport Authority (RTA) was second, and Mai Dubai third. Emirates National Oil Company (ENOC), Dubai Economy, DEWA, and Suqia also participated and were honoured for their innovative projects.

During the past 12 years, DEWA organised 1,424 lectures, benefiting nearly 353,000 students. The savings achieved by educational establishments, students and faculty during this period amounted to 249GWh of electricity, and 1.5 billion gallons of water. These savings contributed to the reduction of 133,000 tonnes of carbon emissions. These cumulative savings in electricity and water are equivalent to approximately AED 168 million.

DEWA helps select 15 start-ups for 2nd Free Electrons programme out of 515 applications from 65 countries

DEWA participated in selecting 15 start-ups in the energy sector out of 515 companies from 65 countries that applied for the 2nd Free Electrons Programme. This is a global energy accelerator programme that includes 9 of the most prominent energy companies in the world. It helps start-ups to develop innovative energy solutions and enables them to develop effective solutions that meet energy needs in the future. The programme organised a week-long boot camp in Lisbon, Portugal, as part of preparations for the 3 phases of the programme that will take place in Sydney and Melbourne in Australia, the Silicon Valley in the United States, and Berlin in Germany.

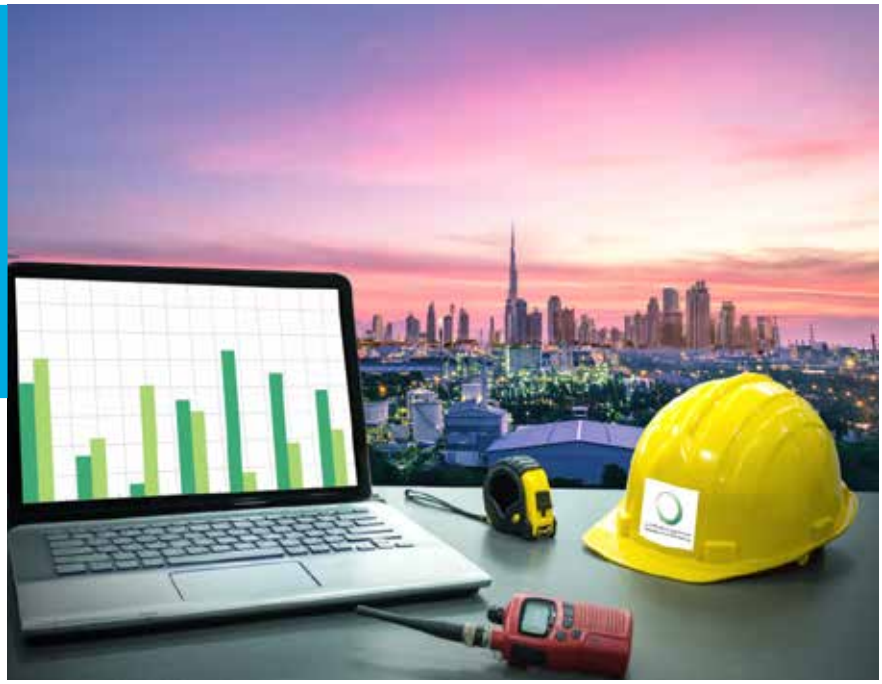
DEWA is one of the most prominent members of the coalition that supports the programme. It includes 9 major international energy companies. These are AusNet from Australia, ESB from Ireland, EDP from Portugal, innogy from the European Union, Origin from Australia, Singapore Power, TEPCO from Japan, and American Electric Power from the United States of America. It also includes Beta-i from Portugal, which specialises in supporting entrepreneurship.

The first Free Electrons programme saw a large turnout from start-ups around the world. The programme received 450 applications from 51 countries. The programme selected 12 start-ups and signed contracts with them to develop innovative and pioneering solutions in future energy areas including energy management, clean and renewable energy systems, energy efficiency, infrastructure development for electric vehicle charging, sustainability and the reducing carbon footprint.

DEWA signs agreement with GE to extend lifetime of gas turbines at E Station at Jebel Ali Power Station

Dubai Electricity and Water Authority (DEWA) has recently signed an agreement with General Electric to extend the lifetime of the GE 9E gas turbines at E Station at the Jebel Ali Power and Desalination Station, worth AED 192.7 million. The work is scheduled to start in the first quarter of 2019 and to end in the first quarter of 2021.

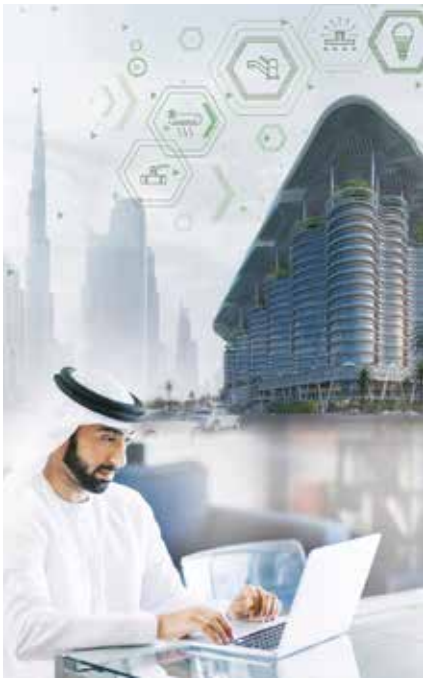
This agreement includes Advanced Gas Path techniques and applications for reducing nitrogen oxides (DLN1). There are three GE 9E gas turbines at E Station in the Jebel Ali Power Station. These were installed in 1989 and were the first large gas turbines to be installed at Jebel Ali. Under this agreement, the project will be implemented from 2019 to 2021. The necessary improvements will be made to extend the life cycle of the gas turbines for an additional 12 years, increase production, improve efficiency and reduce emissions from these turbines.



DEWA provides free energy audit to government, businesses, and industry

DEWA is providing free energy audits to the government, commercial and industrial sectors. A specialised team is making field visits to targeted buildings to conduct energy audits to encourage the use of high-efficiency technologies, and promote awareness about changing behaviour to reduce electricity and water use, conserve natural resources, and protect the environment. The team examines the lighting equipment, air conditioning, water connections, and collects information on rationalisation opportunities to increase the efficiency of electricity and water consumption in buildings. The team then prepares an energy-audit report, which includes an analysis of the information collected and recommendations for rationalising consumption and improving efficiency of appliances and tools. The report is then given to the customer to review and implement the recommendations.

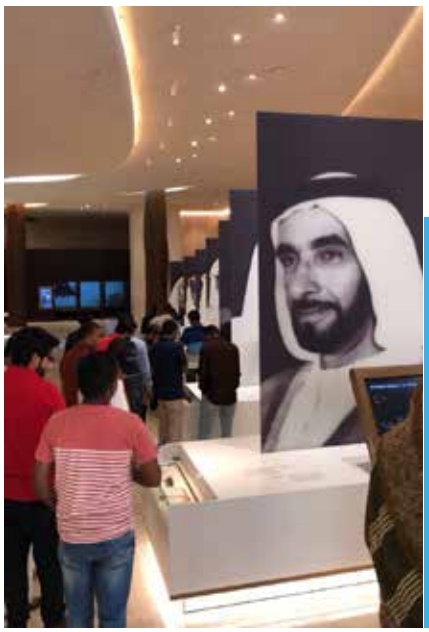
To make the energy-audit service available to a larger number of customers, DEWA has introduced the Do it Yourself – Energy Audit service, where customers collect the required information according to the service manual and send it to DEWA's Energy Audit team. The team analyses the information and prepares the Energy Audit report. DEWA provides the free Energy Audit services to customers from the government, commercial, and industrial sectors. The service can be requested on DEWA's website (www.dewa.gov.ae). The Energy Audit is planned for 50 buildings during 2018. Applications for these categories are welcome until the target number for 2018 is completed.



DEWA activities celebrate Zayed's Centennial

DEWA organised special activities to mark the Centennial of the birth of the late Sheikh Zayed bin Sultan Al Nahyan, who was born on 6 May 1918. The activities highlighted the legacy, values, life, and achievements of the Founding Father, the late Sheikh Zayed. This supports the main objectives of the Year of Zayed, which include increasing commemorating and honouring his life, achievements and status, legacy, and his principles. This was done through various initiatives that are algined to vision and values of the Year of Zayed of Wisdom, Respect, Sustainability, and Human Development. The activities included visits for employees to the Sheikh Zayed Mosque and the Founder's Memorial in Abu Dhabi, and Etihad Museum in Dubai. DEWA is also organising several internal activities to mark the occasion, as well as heritage competitions on its social media channels.

DEWA's staff expressed their happiness to participate in celebrating Zayed's Centennial. They emphasised that the Year of Zayed inspires them to continue the path of philanthropy and giving. The Founding Father started this, and our following his footsteps by doing good deeds and working hard repays the country. Staff are enhancing national identity and following the values and principles of the late Sheikh Zayed, to make the UAE first in all areas.



DEWA takes part in development of Al Marmoom Conservation Reserve with 6 sustainable development projects

DEWA is participating in the comprehensive plan to develop Al Marmoom Conservation Reserve with six projects. The plan was launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to promote Al Marmoom Reserve as a leading cultural area and tourist attraction and support its sustainable development.

FIRST PROJECT: **Powering the reserve with clean energy from the Mohammed bin Rashid Al Maktoum Solar Park to help protect the environment and promote sustainable development**

The Mohammed bin Rashid Al Maktoum Solar Park, which is located within the reserve, is the largest single-site solar park in the world. It will produce 5,000MW by 2030. When completed, it will reduce around 6.5 million tonnes of carbon emissions annually. This promotes sustainable development and green economy in Dubai.

SECOND PROJECT: **Installing solar panels on rooftops of the reserve's facilities and connecting them to DEWA's grid as part of the Shams Dubai initiative**

Shams Dubai, which was launched by DEWA, encourages building owners to install photovoltaic panels to generate electricity from solar power. The electricity generated in used onsite and the surplus is exported to DEWA's grid.

THIRD PROJECT: **Providing smart meters**

DEWA will provide state-of-the-art smart meters with advanced features that contribute to a smart and eco-friendly lifestyle in the reserve. Smart meters provide many advantages to customers, including detailed and accurate readings of consumption, allowing them to follow consumption rates for specific periods, helping them rationalise consumption, in addition to conducting comparisons with normal usage.

FOURTH PROJECT: **Installing Green Charger electric vehicle charging stations**

DEWA is working to install Green Charger electric vehicle charging stations in reserve to encourage the use of environmentally-friendly cars and encourage electric vehicle owners to visit the reserve.

FIFTH PROJECT: **An advanced water infrastructure**

DEWA is working on developing a modern water infrastructure at Al Marmoom Conservation Reserve according to the highest international standards, ensuring the readiness of the network to provide the requirements of all current and future water projects, efficiently and reliably.

SIXTH PROJECT: **Installing Manarati smart poles**

The first Manarti smart pole has been installed at Al Marmoom Conservation Reserve. It has innovative features and applications. It provides 10 smart services that enhance the transformation towards a smart city. The pole is the first of its kind in the Middle East. The pole can be tailored to suit various locations such as residential areas, real estate projects, shopping malls, car parks, and recreational areas. Manarati has the following features:

- Photovoltaic panels
- Smart lighting system
- An electric vehicle charger that is operated and paid for remotely by using a smart app
- A Wi-Fi transmitter that provides Internet access and 4G data connection
- Smart sensors that give accurate information about key environmental data such as temperature, humidity, barometric pressure, noise, CO2, NOX, dust, and ultraviolet radiation.
- A full-HD camera with pan-tilt-zoom function that is connected to the control centre
- A motion detector to save energy
- An emergency button that can be connected with the police or a call centre to be used in emergencies
- Interactive screens
- A facial-recognition camera that measures people's happiness

Supreme Council of Energy updates Demand Side Management Strategy

The Dubai Supreme Council of Energy held its 50th meeting, headed by HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, with HE Saeed Mohammed Al Tayer, Vice Chairman of Dubai Supreme Council of Energy, also present. HE Ahmed Buti Al Muhairbi, Secretary General of the Supreme Council of Energy; Abdulla bin Kalban, MD & CEO of Emirates Global Aluminium; Saif Humaid Al Falasi, CEO of Emirates National Oil Company Ltd (ENOC); Waleed Salman, Vice Chairman of the Dubai Nuclear Energy Committee; Abdullah Abdul Kareem, Director General of the Department of Oil Affairs; Dawood Abdulrahman Al Hajiri, Director General of Dubai Municipality; Khalid Mohammed Sharif, Assistant Director General for the Health, Safety and Environment Control division at Dubai Municipality; Nasser Abu Shehab, CEO of the Strategy & Corporate Governance Sector at the Roads & Transport Authority (RTA), and Frederick Chemin, General Manager of Dubai Petroleum, attended the meeting.

During the meeting, the members reviewed several topics including the Demand Side Management Strategy.

"Today, at the 50th meeting, we reviewed the achievements made in the past nine years since its establishment, in recognition of the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, for sustainable development and achieving the objectives of the UAE Centennial 2071. This will secure a happy future, a better life for future generations, and raise the UAE's status to become the best country in the world," said Al Tayer.

"They reviewed promising strategies and the results achieved through cooperation between member companies of the Council, beginning with the launch of the Dubai Integrated Energy Strategy 2030, the Demand Side Management Strategy 2030, the Carbon Abatement Strategy 2021 and the Dubai Clean Energy Strategy 2050. The Mohammed bin Rashid Al Maktoum Solar Park launched in 2012. It aims to generate 25% of Dubai's total power output from clean energy by 2030," added Al Tayer.

Al Tayer added that, today, five years after the launch of the Demand Side Management Strategy, it has been updated and approved. This will drive the desired savings and reduce energy demand by 30% by 2030.

"It is important to review and update the Demand Side Management Strategy to implement the latest solutions in the field of energy demand reduction. We aim to provide the best of Dubai with the lowest cost by consulting and benefiting from the expertise of the Council's member companies in clean energy production and energy demand management. We work side by side to make use of all the resources and expertise available in the energy sector, in general, and clean energy, in particular," said Al Muhairbi.

MD & CEO of DEWA inspects Mai Dubai expansion project

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, has visited the expansion project of the Mai Dubai bottled water company and factory in Al Yalayis, Al Qudra Road in Dubai. The visit is one of a series of field visits by Al Tayer to evaluate the progress of projects undertaken by DEWA. The MD & CEO of DEWA was also accompanied by Waleed Salman, Executive Vice President of Business Development and Excellence at DEWA.

During the visit, Al Tayer was briefed on the progress of the expansion project by Jay Andres CEO of Mai Dubai, and Alexander Van't Riet, Chief Operating Officer of Mai Dubai. The expansion project started in 2017, and is the first of its kind in the bottled water industry and in the region.

The project consists of three phases that will be completed in 2018. These are the raw material warehouses, the bottling hall, and the finished goods hall. The finished goods hall is 28 metres high and can hold 17,500 pallet positions with the flexibility to expand to 22,000. The project, which is over 80% complete, will include a 1.7-kilometre-long smart monorail to transport goods inside the factory. It will be one of the longest ever built in the region and in the industry. The new factory will have smart equipment that use the latest Artificial Intelligence technologies. This will provide the highest international standards in efficiency, reliability, and quality. The factory will be powered by clean energy provided by on-site photovoltaic panels. This is part of Shams Dubai initiative, which enables building owners to install photovoltaic panels to generate electricity from solar power.

"Establishing Mai Dubai bottled drinking-water company and factory supports the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to provide potable water according to the highest international standards and make Dubai the happiest city on earth for residents and visitors. The expansion project will allow Mai Dubai to raise the level of competition in the bottled water industry, locally and globally, by implementing best practices and the latest technologies in this field," said Al Tayer.

"After four years since the launch of Mai Dubai, it has become a very popular brand and one of the leading bottled drinking water companies in the UAE and the region in record time," added Al Tayer.

"This expansion is not only a smart, innovative and sustainable upgrade for Mai Dubai, it will house the very latest equipment in the industry and is in line with our mission of becoming a regional leading, sustainable and innovative company. Mai Dubai has grown tremendously in the past four years. This regional success would not have been possible if it weren't for the commitment of our staff, the support of our board of directors and the loyalty of our customers," said Andres.

Mai Dubai's commercial production began in March 2014. The factory has received FDA, HACCP, ISO22000, and Emirates Quality Mark (EQM) certifications. The factory currently applies the certified policies and procedures according to OHSAS 18001 Occupational Health and Safety Management, and ISO 14001 Environment Management Systems.

The factory produces low-sodium water with a balanced blend of minerals bottled in small and medium-size bottles of 1.5 litres, 500ml, 330ml and 200ml, as well as five-gallon bottles. It also produces cups in 2 sizes: 100ml and 200ml. To date, Mai Dubai has exported its products to several countries in Asia, Africa, Europe and the GCC.

Mai Dubai is an independent Limited Liability Company fully-owned by DEWA. It is a significant step in the bottled drinking water industry in Dubai, ensuring the highest standards of quality, locally and globally.

Delegation of Arab experts visits the Mohammed bin Rashid Al Maktoum Solar Park and DEWA's Sustainable Building

A delegation of experts who participated in the first Arab Sustainable Development Week, organised by the Environmental Centre for Arab Towns (ECAT) in Dubai, visited the Mohammed bin Rashid Al Maktoum Solar Park in Dubai, and DEWA's Sustainable Building in Al Quoz. During the visit, the delegation was briefed about DEWA's solar projects and initiatives in sustainability, environmental protection, and rationalisation of electricity and water use. DEWA's staff also presented its smart initiatives to support the Smart Dubai initiative, to make Dubai the smartest and happiest city in the world. The delegation visited the Mohammed bin Rashid Al Maktoum Solar Park in Seih Al Dahal, which is the largest single-site solar park in the world, and DEWA's Sustainable Building, which is the first sustainable government building in the UAE and the largest government building in the world to receive a Platinum Rating for green buildings from Leadership in Energy and Environmental Design (LEED). It achieved 98 out of 110 points as per the rating criteria for the design set by the US Green Building Council.

DEWA and Drydocks World sign MoU to cooperate in renewable energy and asset management

DEWA has signed a Memorandum of Understanding (MoU) with Drydocks World, a DP World company, to collaborate in renewable energy projects and exchange expertise and best practices in asset management and maintenance, as well other programmes and activities of mutual interest. This is part of DEWA's efforts to enhance strategic partnerships with government departments and organisations. The MoU was signed by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, and HE Sultan Ahmed Bin Sulayem, Group Chairman and CEO of DP World. The signing ceremony was attended by Capt. Rado Antolovic, CEO of Drydocks World, and Haroon Al Awadhi, Divisional Manager – Technical and Maintenance at Drydocks World. It was also attended by Rashid Bin Humaidan, Executive Vice President of Distribution Power, and Khawla Al Mehairi, Executive Vice President of Strategy & Government Communications at DEWA.

A poem about DEWA's winning 6 awards at DGEP 2018

By Ayesha Al Shaer

Dubai Giving has come with all the good things

We were distinguished by People-of-Determination-Friendly Entity, Best in Customers' Happiness, and Best in Innovative Initiative Awards

As well as Best Field Employee and the Unknown Soldier Medals

In DEWA, our motto is excellence

With all our efforts in the Year of Giving

Today, in the Year of Zayed, Sheikh Mohammed honours us

At DEWA, we're always distinguished

Going on the path of Zayed

We follow his footsteps and continue to excel.

DEWA saves over AED15 million annually through electricity and water conservation in its buildings and generation plants

The energy savings programme implemented in DEWA's buildings and at electricity generation and water production plants, has achieved savings exceeding AED15 million in 2017. DEWA has set up an energy-management committee to increase the efficiency of electricity and water use in its buildings by implementing a number of measures to rationalise and monitor use, as well as identify and address the causes of any increase in consumption. The internal procedures have contributed to annual savings of AED1.86 million. In addition, DEWA signed two Energy Savings Performance Contracts (ESPCs) with Etihad Energy Services Company (Etihad ESCO) to improve and enhance the overall energy efficiency of the lighting infrastructure of the power and water plants at Jebel Ali, as well as 7 of DEWA's buildings. Etihad ESCO conducted a technical audit for DEWA's facilities to identify energy efficiency measures to reduce consumption.

The first project involves the introduction of state-of-the-art energy-saving systems and the use of high-efficiency lighting systems at DEWA's electricity and water stations in Jebel Ali. The first phase of the project, which was implemented in 2016, included the installation of 8,508 LED lighting units, which contributed to a 76% reduction in consumption, equivalent to annual savings of AED6.8 million with the costs being recouped within 3 years. The second phase, which was implemented in 2017, included the installation of 15,000 LED lighting units to achieve an annual saving of AED 4.22 million with the costs being recouped within 5 years. The third phase of the first project is currently being implemented to replace nearly 35,000 lighting units. It is expected to save AED10 million annually with the costs being recouped within 3 years. The second project involves retrofitting 7 of DEWA's buildings, through improvements in air conditioning systems and equipment, water systems, lighting and installation of motion sensors to control them, as well as thermal insulation of the glass facades. This contract will reduce electricity and water consumption by 30%, saving AED 2.23 million annually, with the costs being recouped within 6 years. The two projects are expected to contribute to reducing carbon dioxide emissions by 22,750 metric tonnes annually, equivalent to planting 26,700 trees annually.

DEWA celebrates marriages of 71 Emirati staff at 11th mass wedding

DEWA has organised its 11th Anwar Dubai mass wedding for 71 of its Emirati staff at a ceremony held under the patronage and in the presence of HH Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of DEWA. The mass wedding is part of DEWA's Corporate Social Responsibility (CSR) strategy, and its commitment to the happiness of its employees. The wedding took place in a joyful and festive atmosphere at the Dubai World Trade Centre. Since 2007, 509 staff have got married through Anwar Dubai.

HH Sheikh Hamdan bin Rashid Al Maktoum was welcomed by HE Matar Humaid Al Tayer, Chairman of DEWA, and HE Saeed Mohammed Al Tayer, MD and CEO of DEWA, along with other Board Members, Department Heads, and VIPs.

The ceremony was attended by HE Saif Al Falasi, CEO of Emirates National Oil Group (ENOC), HE Ahmad Shafar, CEO of Emirates Central Cooling Systems Corporation (Empower), senior officials and staff from DEWA, along with families of the brides and grooms.

Al Tayer thanked HH Sheikh Hamdan bin Rashid Al Maktoum for his presence and patronage of the 11th mass wedding for DEWA's staff. "The basis for such celebrations was instilled by the late Sheikh Zayed bin Sultan Al Nahyan. This year, we celebrate the centennial of the birth of the UAE's Founding Father. We remember his leadership, wisdom and vision, which put the UAE on the path of excellence, and reinforced its regional and global status as a model for happiness and positivity, under the leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE and His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai."

"DEWA is committed to its corporate social responsibility to achieve the UAE Centennial 2071, which is directed to future generations and is an advanced stage of development that the UAE has sought since its establishment. This strengthens the UAE's leadership and its desire to become the best country in the world by the 100th anniversary of its establishment in 2071. DEWA's mass wedding is one of the important social events that we organise annually to achieve psychological, social and familial stability of employees, by providing all forms of support to Emirati young people who wish to marry and reduce the burden and cost of weddings. This supports them and their country, the land of giving. The contribution of His Highness will add to the development of a new life for the UAE's young men and women, and contribute to the happiness and sustainability of our people. 509 staff have been married through Anwar Dubai since it was launched in 2007," said Al Tayer.

"Over the last eleven years, the mass wedding ceremony has contributed to the completion of marriage ceremonies for numerous UAE National staff. This reflects the true values of UAE society which include solidarity and social cohesion and encourages Emirati men and women to get married and build happy and settled families without getting into debt or loans. This has strengthened the institutional approach of DEWA to support Emirati youth and the values of national identity, enhancing the loyalty of employees, and establishing a secure future for them and for generations to come," added Al Tayer.

HE Saeed Al Tayer congratulated the brides and grooms and wished them happiness, asking God to help them fulfil their goals and aspirations for a healthy and stable family life.

"As part of its Corporate Social Responsibility, DEWA continues its efforts to support the marriage of Emirati youth, and strengthen family settlement in order to develop a cohesive society that preserves its national identity," said Khawla Al Mehairi, Executive Vice President of Strategy & Government Communications and Chairperson of DEWA Women's Committee.

The ceremony was presented by Mahmoud Yousef, It featured a host of traditional activities and shows including Ayala and Harbiya, a poetry session by Musabah Ali Al Kaabi, and a musical operetta entitled 'The Art of Al Azi'. The operetta was prepared and supervised by poet Ali Al-Khawar and was performed by Faisal Al-Jassim.

DEWA launches ‘Umrat Zayed Al Khair’ for employees during Ramadan

DEWA launched the ‘Umrat Zayed Al Khair’ campaign for the second consecutive year, to enable 100 employees from its non-supervisory staff to visit the Holy Mosque, to perform Umrah during the Holy Month of Ramadan, without any financial burden. This campaign is part of DEWA’s integrated voluntary and social programme during the Year of Zayed 2018, to perpetuate the legacy of the late Sheikh Zayed bin Sultan Al Nahyan, through projects and initiatives in-line with his vision and principles, and as an extension of DEWA's initiatives during the Year of Giving 2017.

“The Umrat al Khair initiative aims at making our employees happy, and instilling the spirit of mutual support and communication between different levels and nationalities, as well as enhancing our employees’ loyalty. We believe that this visit has a great positive effect on our employees and it helps them achieve the desired balance between body and soul. This is part of DEWA’s strategy to support its employees as they are key to achieving institutional excellence at all levels and divisions,” said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

DEWA inaugurates updated Centre for Assessment and Development of Human Resources at Al Najma

Dubai Electricity and Water Authority (DEWA) has inaugurated the updated Centre for Assessment and Development of Human Resources at Al Najma. DEWA opened the centre in 2015 and started operating in early 2016 to support DEWA’s strategy in smart transformation in all procedures for selecting the best-qualified staff. This supports government efforts to invest in and develop national talent, and supports DEWA’s vision to become a sustainable innovative world-class utility.

In addition to relying on internationally recognised and accredited tests from the British Psychological Society (BPS), the Centre includes a group of professional psychologists and internationally recognised and qualified Emirati staff. This contributes to raising the level of accuracy and competency in the transparent selection of candidates, with several different languages.

The Centre is mainly involved in Human Resources. It has evaluated over 960 candidates for various vacancies. The Centre has also evaluated over 1,010 students applying for scholarships, and 620 employees of different positions, for development.

حكومة دبي
GOVERNMENT OF DUBAI

عام زايد
YEAR OF ZAYED

هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

Under the Patronage of His Highness Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance of the UAE and President of DEWA

WATER

ENERGY

WETEX 2018

TECHNOLOGY

ENVIRONMENT

Part of Dubai Electricity and Water Authority's Green Week Initiative

23-25 October 2018 | Za'abeel Halls 1-3 & Halls 1-8

Dubai International Convention and Exhibition Centre

JOIN US IN THE 20TH EXHIBITION AND BE PART OF A SUSTAINABLE FUTURE.

WETEX 2018 is the global platform that brings national and international companies closer to the latest technology and resource-management solutions. Experience all the latest developments in the Water, Energy, Technology and Environment sectors by visiting the biggest international exhibition on sustainability.

BOOK YOUR SPACE @ WETEX.AE

AT THE FOREFRONT OF SUSTAINABILITY

DIAMOND SPONSOR
SIEMENS Ingenuity for life

OFFICIAL ENERGY PARTNER
DEPARTMENT OF ENERGY

TITANIUM SPONSORS
THE SUSTAINABLE CITY
ACWA POWER
ABB

INNOVATION SPONSOR
EGA
EMIRATES GLOBAL ALUMINIUM

OFFICIAL SUSTAINABLE TRANSPORTATION PARTNER
RTA

STRATEGIC SPONSORS
GULF Eternit INDUSTRIES
FPI FUTURE PIPE INDUSTRIES
Ducab
EEE
Jeddah Cables COMPANY
Supreme Council of Energy
alfanar
df Energy
enoc
Federal Electricity & Water Authority
Dubai Silicon Oasis Authority

PLATINUM SPONSORS
ENERGOPROJEKT ENTEL
maetel

STRATEGIC MEDIA SPONSOR
CNBC عربية

MEDIA PARTNER
dubaieye 103.8

GOLD SPONSORS
BAHRA ELECTRIC
Jafza
موانئ دبي العالمية DP WORLD
Emirates Transformer & Switchgear
Tesar
Lucy Electric
BEST
DTC TECHNOLOGY
Dragon Oil
SEL
MITSUBISHI ELECTRIC Changes for the Better

WORKSHOP PARTNERS
AMITY UNIVERSITY DUBAI
DUBAI MUNICIPALITY

#WETEX2018 #GREENWEEK
WetexDubai

EXPO 2020 DUBAI UAE
OFFICIAL SUSTAINABLE ENERGY PARTNER

For General Sales Enquiries
T: +971 4 515 1460 E: sales_general@wetex.ae
For Media & Marketing Enquiries
T: +971 4 515 1784 E: media@wetex.ae

MESSAGE

KHAWLA AL MEHAIRI
Executive Vice President of Strategy & Government Communications and Chairperson, DEWA Women's Committee
Dubai Electricity and Water Authority

DEWA's female employees make more achievements

Everyone was delighted that DEWA's female team came second in the Gov Games. HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, Chairman of the Dubai Executive Council and Chairman of Dubai Sports Council, launched the Gov Games with the theme 'One Team. One Goal.' The initiative aims to promote teamwork and reinforce team spirit amongst government employees.

I would like to thank our wise leadership, represented by His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE and His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, for their huge support. Their directives were the guiding light of our youth towards a brighter tomorrow.

The achievements made by DEWA's female employees reflect the support of our senior management, headed by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. On this occasion, I would like to congratulate His Excellency on the achievements made under his leadership and the endless support we all receive from him.

His support to the male and female teams at the Gov Games had great impact on all the contestants.

It was a motivation for them to achieve remarkable results and lift DEWA's status at the biggest government sports event.

Although the women's sports team won many individual and group awards in several national tournaments, their victory in the Gov Games, the first of its kind in the world, was special. Gov Games was the biggest government sports event, and was an opportunity to highlight the talent of male and female employees from different departments.

This achievement reflects the success of DEWA Women's Committee in establishing a culture of sport among female employees, encouraging them to balance their personal and social lives, and inviting them to devote more time to taking care of themselves and not being preoccupied with life's difficulties. It also motivated them to overcome the obstacles they face, and encouraged them to make more personal achievements, through a series of sports activities that are annually organised by DEWA.

DEWA believes in the role of women as an essential part in society. Besides their roles as mothers and mentors of generations, DEWA contributes to the advancement of national development through their qualifications and skills. The advancement of the UAE was based on balanced opportunities for men and women.

We congratulate all participants of the Gov Games on their achievements, and all DEWA's employees for their efforts. DEWA renews its commitment, through DEWA Women's Committee, to support all its employees to make more achievements, at the professionally, as well as in sports.

Dubai Quality Group honours DEWA as Main Sponsor of the Emirates Women Award

Under the patronage of HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman of Dubai Civil Aviation Authority, President of Dubai Civil Aviation Authority, and Honorary Patron of Dubai Quality Group, the Dubai Quality Group honoured DEWA as the Main Sponsor of the 15th Emirates Women Award, which was organised under the slogan 'Wisdom, Goodness, and Giving.' Fatma Deemas, Senior Manager of Internal Communications and Vice Chairman of DEWA's Women's Committee, received the award in the presence of Fatma Buti Al Mheiri, the first woman Chairman Dubai Quality Group, Board Members, VIPs, businesswomen, businessmen, and the media. Fatima Al Jokar, Assistant Legal Advisor at DEWA and Chairperson of DEWA's Youth Council, won the Emirates Women Award for Community Contributions in the Professionals Category.

"DEWA's sponsorship of the Emirates Women Award is part of its strategy to support national activities that aim to empower women, enhance their social participation, and promote more participation by women in business and the sustainable development of the UAE. The Award is in line with DEWA's strategy to promote women's participation in development and innovation and highlight their contribution in the successful community development and prosperity. By participating in such activities, we provide an interactive platform for DEWA's female staff to exchange knowledge and expertise and learn new skills that contribute to developing their personal and professional capabilities," said Khawla Al Mehairi, Executive Vice President of Strategy and Government Communications, and Chairperson of DEWA Women's Committee.

Al Joker valued her winning the prestigious award, which recognises the contributions of businesswomen and female professional Emiratis and residents. The award encourages women and girls to reveal their active role in society, as part of the UAE strategy to rely on women as partners in the development process. She emphasised that winning the award underlines DEWA's important role in encouraging staff to promote social responsibility, and consolidate volunteering among them and encourage them to participate in various community, humanitarian, and charitable initiatives and programmes.

DEWA Women's Committee reviews achievements in 2017 and programmes in 2018

DEWA's Women's Committee reviewed its achievements in 2017 and its programmes for 2018. HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, and Khawla Al Mehairi, Executive Vice President of Strategy and Government Communications at DEWA, and Chairperson of the Women's Committee and members of the committee were present for the meeting. Al Tayer commended the efforts of the Women's Committee. He was pleased with the results of the projects and programmes that it has implemented to serve DEWA's female employees. These programmes help them achieve a balance between their professional and social lives and make use of their scientific and practical capabilities to succeed and excel.

Al Tayer noted that DEWA's female staff increased from 1,661 in 2015 to 1,910 currently. A total of 591 female employees work in engineering and other technical domains. Emirati female staff constitute 78.3% of DEWA's female workforce. The largest number of female employees work in the Innovation and The Future sector, with 527 female staff. This confirms their efficiency and excellence in this important field.

Al Mehairi noted that DEWA's female employees' happiness about the committee's activities and events was rated at 88.6% in 2017. The Women's Committee adopts a comprehensive approach that explores the different aspects that matter to women and translates them into plans and programmes that contribute to developing their skills and capabilities. DEWA's female staff were given over 38,000 training opportunities in the past three years in addition to 149 scholarships.

DEWA Women's Committee includes five subcommittees. These are the Female Engineers Committee, the Education and Self Development Committee, the Innovation Committee, the Sports Committee, and the 'Danat' Committee for Coordination and Follow-up. In 2016 and 2017, the Women's Committee organised 78 activities and initiatives that included creativity labs, workshops, lectures, social activities, recreational trips, weekly sports classes, and other activities. In the Year of Giving, DEWA organised the 3rd Emirati Women's Forum, under the theme, 'Women are partners in giving,' during Emirati Women's Day. The committee also organised activities during national and international occasions, such as, International Women's Day, Mother's Day, World Health Day, World Day for Cultural Diversity for Dialogue and Development, World Breastfeeding Week, World Heart Day, World Osteoporosis Day, World Breast Cancer Day, in cooperation with related organisations.

Last year, the Female Engineers' Committee designed a professional uniform for DEWA's female engineers, and established a women's majlis at Al Warsan. The Education and Self Development Committee organised training courses in several areas that contributed to providing female employees with professional and life skills. The sports committee encouraged female employees to participate in DEWA's female sports teams. The women's sports teams took part in many sports activities in 2017 the 5th Sheikha Hind Women's Sports Tournament where they achieved excellent results in 10 individual and team sports. The ladies also took part in the Dubai Fitness Challenge, the obstacles race in Dubai Ladies Club, Sharjah Ladies Run, Sand Storm, and the Dubai Health Authority Badminton Competition.

HE REEM IBRAHIM AL HASHIMY

Minister of State for International Cooperation and Managing Director of Dubai Expo 2020, talks to Al Masdar

1) How will Expo 2020 contribute to promoting sustainability in Dubai and the UAE?

Expo 2020 Dubai has three sub-themes: Opportunity, Mobility and Sustainability.

From the very beginning of the plan to host World Expo, the aim was not only to ensure organisational success of an exceptional Expo that impresses the world. Sustainability was built into the core of the vision and essence of the project. We pledged that Expo 2020 Dubai will be one of the most sustainable Expos in history, and an inspiring event that leaves a sustainable legacy for Dubai, the UAE, and the world.

Expo 2020 Dubai aspires to be the most sustainable expo, but we do not intend to stop there. We are working to have an impact beyond the venue of the event and its duration. We firmly believe that sustainability is not limited to water efficiency or the use of solar panels or environmentally friendly building materials. In line with our mission 'Connecting Minds, Creating the Future', we work with partners and stakeholders to achieve four main objectives.

First: Achieving sustainability through the projects we are implementing and building a sustainable legacy of sustainable infrastructure and sustainable practices.

Second: Nationally contributing by spreading awareness on the principles of sustainability and engaging the community in achieving sustainable lifestyles.

Third: Influencing the region by introducing a model for all the countries in the region, that have a similar environment and climate.

Fourth: Stimulate global support through individuals and communities who develop solutions to the challenges facing the world.

2) Expo 2020 Dubai seeks to use most of its energy from diverse renewable sources of energy. What plans have been adopted to achieve this ambitious goal?

We are working to achieve the ambitious goals that we set for ourselves, including making 50% of the energy used at Expo 2020 Dubai from renewable resources.

We seek to diversify the sources that provide the site with energy through a plan that depends on connecting to the off-site solar power stations as well as the solar panels on the site's buildings and outside parking lots, and we are studying plans for installing wind turbines to generate electricity from wind.

In addition, there will be scope for pilot projects to generate energy in innovative ways by employing the movement of people, and vehicles among others.

Innovation in this field is not limited to power generation. Due to the nature of renewable energy resources that are unstable in terms of productivity and capacity, we plan to establish decentralised electrical storage systems that rely on batteries that can re-supply the grid as needed, or are used to charge electric vehicles, equipment and tools.

3) DEWA is the official sustainable energy partner of Expo 2020 Dubai. How do you see the contribution of DEWA's plans and projects in achieving the objectives of Expo and its sub-themes: sustainability, opportunity and mobility?

Having Dubai Electricity and Water Authority (DEWA) as the official sustainable energy partner of Expo 2020, is vital in providing opportunities, enabling mobility and achieving sustainability.

We work with DEWA to capitalise on their experiences in implementing various projects and initiatives related to sustainability, energy and water.

DEWA's projects that support Expo 2020 Dubai include the construction of three 132/11 kilovolt (kV) substations with 45 kilometres (km) of high-voltage (132kV) cables, each dedicated to one of the theme

areas at Expo 2020 Dubai: Opportunity, Mobility and Sustainability.

4) DEWA signed an MoU with Expo 2020 Dubai and Siemens to develop the first solar-driven hydrogen electrolysis facility. Are there other innovative sustainable technologies that Expo 2020 intends to offer to its visitors?

Definitely, Expo 2020 Dubai celebrates innovation and creativity and will be able to offer a lot through cooperation with partners, participating countries, organisations, companies and individuals.

The World Expo plays an active and vital role in guiding the world towards a more sustainable life. It is the only event that brings together the world's disciplines and interests. The theme of Expo 2020 Dubai is 'Connecting Minds, Creating the Future.'

Here, we want to combine ideas, creativity and innovation to build a better future for the UAE, the region and the world at large.

As Expo 2020 Dubai will be a meeting point for leaders, creators and decision-makers from around the world; it will provide an ideal opportunity for review, dialogue, exchange of ideas and best practices for sustainable practices and actions.

Expo is also working to raise public awareness and engage communities in education on the principles of sustainability and help develop solutions that have a significant impact.

5) Can you tell us about the support that Expo 2020 Dubai provides to the innovations to improve life quality and protect the environment?

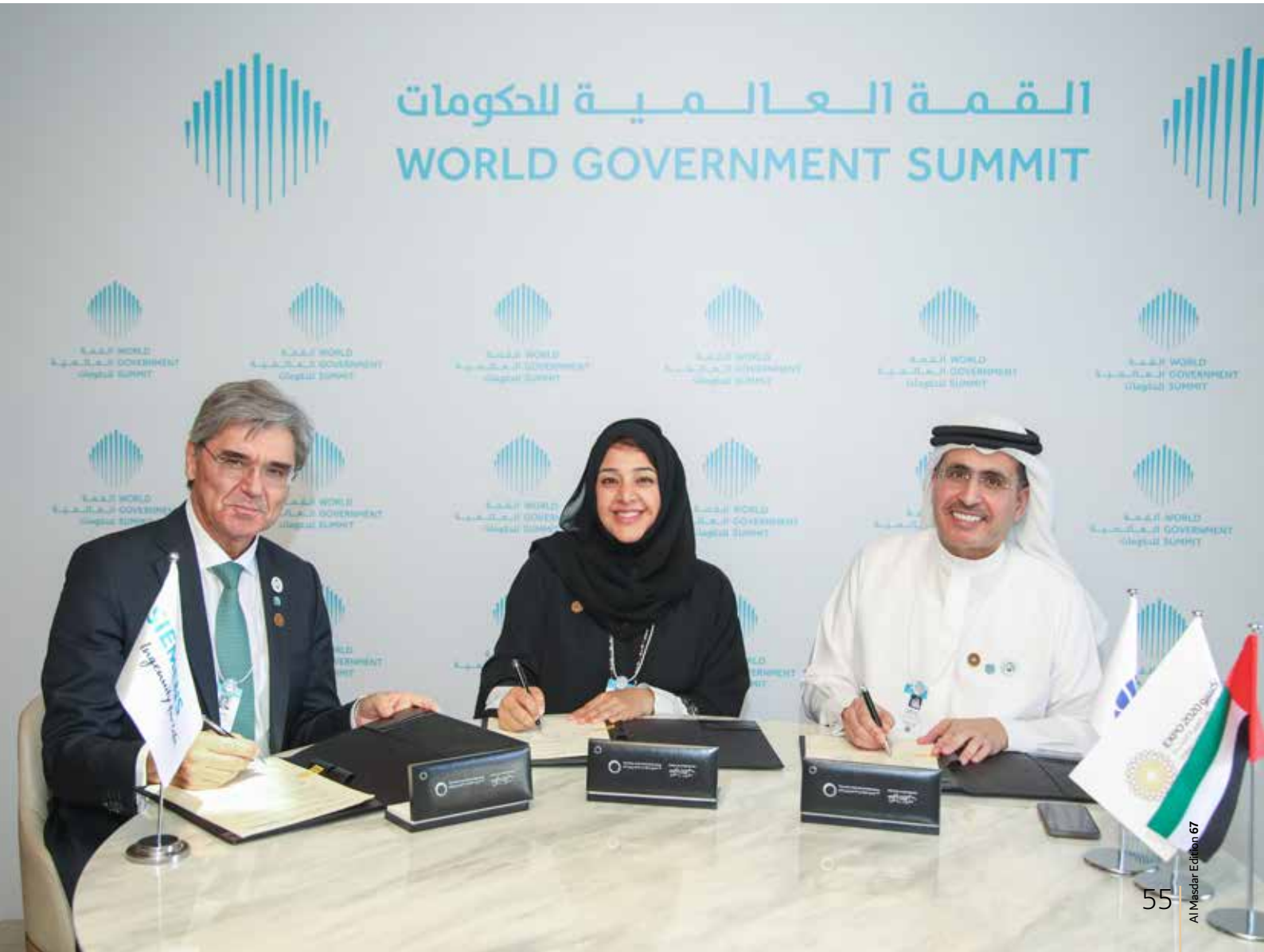
Expo 2020 will consolidate a financially and morally sustainable legacy.

In addition to its legacy of sustainable buildings and reuse of the site, Expo 2020 Dubai seeks to make a qualitative change in the mentality of its visitors, people in the UAE and across the region.

The global event will be a forum for sustainable and innovative experiences and practices. It will open the door for a global dialogue on sustainability, to benefit humanity.

Expo 2020 Dubai is driving global sustainability efforts by supporting innovative projects that improve people's lives and save the planet through Expo Live, an innovation and partnership programme, with an allocation of USD100 million. It aims to achieve sustainable impact by funding creative solutions that improves lives while preserving our world.

The Innovation Impact Grant Programme has supported over 45 innovators from 30 countries. 18 projects focus on sustainability, including energy-saving for remote and disadvantaged communities, such as a project developed by My Shelter Foundation, a Philippine-based initiative called Liter of Light - a low-cost, easy-to-use solar lamp that uses readily available materials, including plastic bottles and low-cost components, to produce a reliable lighting source.



ELFATIH ELTOM

The UAE is my homeland, and DEWA is my home

In December 1980, Elfatih Eltom from Sudan visited one of his relatives in Dubai. This relative suggested that Eltom should stay and look for a job in the Emirate. In March 1981, Eltom joined Dubai Electricity Company, which was later merged with the Dubai Water Department in 1992 according to a decree issued by the late Sheikh Maktoum bin Rashid Al Maktoum. Eltom was the first Arab to work at the desalination plant in Dubai, and currently works as a Specialist-Environment & Lab Support.

You have spent many years in the UAE. Tell us more about it.

I have spent more than half of my life in Dubai. I consider the UAE my homeland, and DEWA my home. When I came to Dubai, 37 years ago, I was planning to stay for three years at the most, and then go back to the United States to get my master's and doctorate degrees since I had graduated with a Bachelor of Chemistry in 1980 from North Carolina. However, I fell in love with Dubai and decided to settle here, and gave up the idea of graduate degrees. I found what I was looking for in Dubai, in terms of professional and personal development, as well as security. I grew up with the Emirate, and kept up with its rapid development, and the huge boom in its infrastructure.

- **Tell us about your experience joining DEWA**

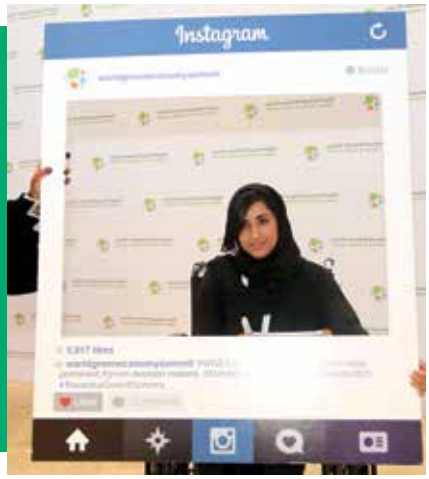
At the beginning, I joined Dubai Electricity Company, which was later merged with the Dubai Water Department to become DEWA. I did not find it difficult to work here due to my experience working in the US, which is also multi-cultural, just like Dubai. I started working as a chemist at the laboratory at D station, which was the first station in the power production and desalination plant. I was enthusiastic about work, and had a passion for development. I would like to highlight that DEWA has witnessed tremendous development under the leadership of His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA.

- **In your opinion, what is the reason for Dubai's success?**

The main reason for Dubai's tremendous development lies in the vision of the wise leadership who plans for decades ahead. A lot of the success of the government departments in Dubai is associated with the establishment of the Dubai Government Excellence Program (DGEP) award, which encouraged all departments to develop and work hard, according to the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai.

HAYFAA HADDAD

"My job is to make customers happy... And DEWA allowed me to believe in myself and achieve my ambitions"



Career overview

Hayfaa Haddad is a 29-year-old woman worked at several public and private banking and insurance companies at the beginning of her career, before joining Dubai Electricity and Water Authority (DEWA). In 2014, she joined DEWA as a receptionist at the Umm Ramool Customer Happiness Centre. She took a number of training courses in several fields, before and after joining DEWA, to enhance her professional skills and abilities, because she seeks to achieve career progression, and to reach leadership positions at DEWA.

DEWA dismissed my doubts from the beginning

Haddad was welcomed at DEWA, from the day of her interview, and until today. "I saw the job announcement online, but I was hesitant at the beginning. I was afraid to apply for a job that does not suit my academic and practical qualifications. But the evaluation committee was very welcoming. All the officials and colleagues at DEWA were very supportive and encouraging, especially HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. I want to extend my sincere gratitude and appreciation for his unlimited efforts to integrate people of determination, provide them with a disability-friendly work environment, and meets their aspirations. This was what unleashed my energy and perseverance at work. It also helped me believe in myself, to reach the position I have always dreamed of," said Haddad.

'Omniyati' initiative will allow me to drive a car

With a lot of passion, Haddad recalls her dream to drive a car. DEWA's Omniyati initiative was launched in 2016 to grant the wishes of DEWA's people of determination. Omniyati will cover the expenses of her driving lessons, just as the Omniyati initiative's organisors made Waleed Al Baloushi's dream of flying a plane come true. Haddad confirms that Abshir's team, which is responsible for DEWA's people of determination. Specially-trained employees provide them with all the care and psychological and social support, with additional lectures and counselling sessions by psychologists and social workers.

'Oh, how I love school'

Haddad wrote an educational book entitled, 'Oh, how I love school,' just for fun because she enjoys writing as a hobby. She was surprised to know about DEWA's desire to print and publish the book on its own expense. Indeed, DEWA printed several copies of the book. Haddad explains that her happiness was complete when she was honoured for this by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, Khawla Al Mehairi, Executive Vice President of Strategy and Government Communications, and Marwan Bin Haidar, Executive Vice President of Innovation and the Future at DEWA.

OTHER NEWS

Mansour bin Zayed launches model for expansion plans in Ruwais


Mansour bin Zayed during the launch of the model for expansion plans in Ruwais

His Highness Sheikh Mansour bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Presidential Affairs, launched an interactive model that unveiled the expansion plans in Ruwais, while attending the ADNOC Downstream Investment Forum, at Emirates Palace in Abu Dhabi.

His Highness confirmed that due to the vision of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, the UAE has established itself as a leading global hub for various business sectors in the oil and gas sector by pursuing an approach based on strategic partnerships, close cooperation to achieve common interests and promoting the growth and diversification of the national economy. This works to include technologically advanced industries that bring additional value to the optimum utilisation of hydrocarbon resources.

The launch of the expansion plans in Ruwais is expected to transform it into the world's largest fully integrated refining and petrochemicals complex.

The Ruwais complex includes one of the largest industrial areas for refining and petrochemicals. ADNOC is seeking to develop the complex to become the world's largest integrated refining and petrochemical complex, which will also include a comprehensive integrated environmental manufacturing system through the construction of two complexes for manufacturing industries and petrochemical derivatives.

France's EDF buys 450MW wind farm project in Scotland


The Neart na Gaoithe project

France's EDF has bought a 450 megawatt (MW) wind farm project off the coast of Scotland, estimated to cost about 1.8 billion pounds, from developer Mainstream Renewable Power. This took place through EDF Energy Renewables in UK, which is a joint company between EDF Energy and EDF Energies Nouvelles.

The wind farm, covering 105 square kilometers, is expected to produce up to 450MW of renewable energy, equivalent to an annual electricity supply of 375,000 homes. The project involves the production of electricity through offshore wind power, located off the coast of Scotland. The project also benefits from wind power systems that are among the best in the world.

The Neart na Gaoithe project is expected to start generating power in 2023, and will be open to other investors in time.

Tabreed awards contract to Canadian company for Jabal Omar project

CNBC-Lavalin, a Canadian engineering and construction company, has been awarded a 160 million riyals contract in Mecca by Tabreed Saudi Arabia, a subsidiary of National Central Cooling Company, listed on the Dubai bourse.


Jabal Omar project, one of the biggest residential investment projects in Mecca

Under the contract, the company will design, construct and finance an additional cooling unit with a capacity of 12,000 tonnes with all associated equipment including power transmission stations and a refrigerated water network, which will achieve a total cooling capacity of 47,000 tons for Jabal Omar Development Company in Mecca.

The expansion is worth 160 million riyals, according to a statement issued by Lavalin, which is the seventh domestic cooling project for the company in Saudi Arabia.

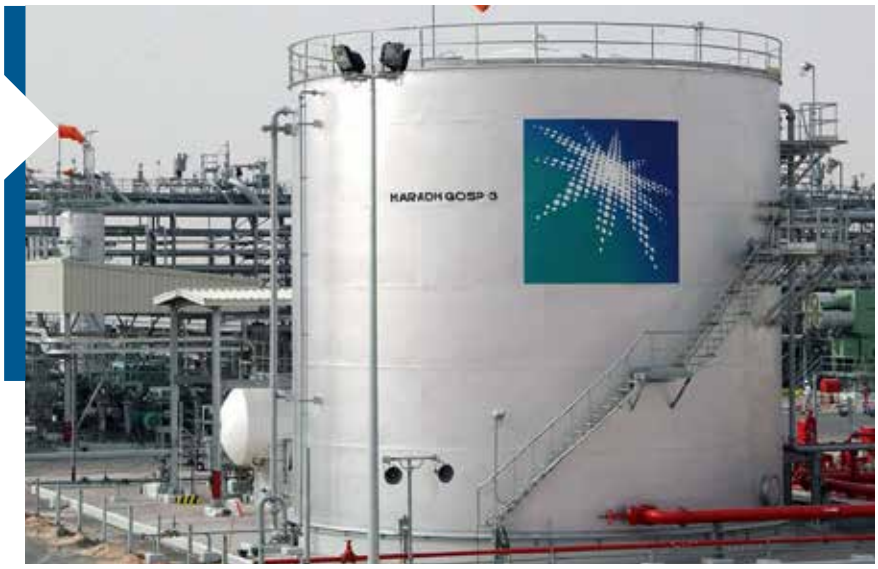
The project is currently under construction, in addition to the preparatory construction activities, and is scheduled to commence business in early July 2018.

The Jabal Omar project in Mecca is classified as one of the biggest projects, with quality planning and high design, and aims to lead to comprehensive development.

Saudi Aramco and Petronas launch corporate identity of their Refinery and Petrochemical Joint Ventures in Malaysia

In May 2018, Petroliam Nasional Berhad (PETRONAS), the national oil company of Malaysia and Saudi Arabian Oil Company (Saudi Aramco); launched the corporate identity for their joint ventures in the Pengerang Integrated Complex (PIC) located in Pengerang, Johor, Malaysia, namely Pengerang Refining Company Sdn Bhd (PRefChem Refining) *1 and Pengerang Petrochemical Company Sdn Bhd (PRefChem Petrochemical)*2, collectively known as "PRefChem".

PETRONAS and Saudi Aramco had earlier in March 2018 concluded the Share Purchase Agreement for equal ownership and participation in the operations of the refinery, cracker and selected petrochemical facilities in the PIC.



Aramco

Russia launches first floating nuclear power plant

Academic Lomonosov

In May 2018, Russia announced launching the first floating nuclear power plant in the world. The announcement was made during a ceremony at Murmansk, in northwest Russia, where it will be loaded up with fuel, to travel to Siberia.

The nuclear plant, which is called Academik Lomonosov, is a 144-meter-long ship with a capacity of 21,000 tonnes, built by Russia's nuclear power firm Rosatom in St. Petersburg. It has two 35MW nuclear reactors, to supply ice skis with energy. The ship can produce enough electricity to power a town of 200,000 residents, far more than the 5,000 living in Russia's northernmost town.

The plant will mainly be used to supply the oil platforms with energy as Russia expands northward to the North Pole to explore for oil and gas, making the need for electricity necessary in these remote areas.

SUSTAINABLE CITIES

SHANGHAI

Shanghai ... a sustainable city according to modern global standards

- **Renewable and clean energy is a promising future for Shanghai**
- **Cities that will change the shape of Shanghai and China ... Lingang New City as an example**
- **Shanghai builds an integrated agricultural area with high-rise vertical farms**

Shanghai is China's economic and commercial capital and one of the world's largest and most populous cities with 32 million people. In addition to its picturesque nature, the city is characterised by its high-rise and developed buildings; it is the city of skyscrapers.

In the path towards sustainability, large cities need alternative schemes to provide and conserve energy. They also need a healthy environmental system that protects against emissions and develops environmentally-friendly transport systems for the city's residents. Despite all these difficulties, Shanghai has succeeded in bringing together sustainable development and modern living conditions.

Shanghai is ranked among 23 cities in 11 developing countries, likely to be exposed to rising sea levels, increased storm activity, potential coastal flooding, damage to infrastructure, and danger to water and food security. To combat these challenges, the Global Environment Fund (GEF), in collaboration with the World Bank ensured it could participate in the Sustainable Cities Programme (SCP).

Shanghai ... The renewable energy giant

With the city's rapid growth, Shanghai is looking for environmentally-friendly alternatives to energy production. China is the world's largest consumer of energy. Along with other major cities around the world, these cities consume over two-thirds of the world's energy supply, accounting for 70% of all carbon emissions. Hence, Shanghai has set on an ambitious plan to increase its dependence on alternative energy to 12% of the total energy used. Shanghai has the first wind power plant in China.

China is at the centre of a global shift towards clean energy. At the beginning of 2017, China announced it would invest USD 360 billion in renewable energy by 2020. As the world's largest energy market, it seeks to reduce its coal-fired electricity production.

Lingang new City ... A model for sustainability and industrial prosperity

There is no other city on earth like the Lingang new city in Shanghai. This new urban centre has streets that are arranged in concentric circles around a giant man-made lake on land reclaimed from the sea. It was the result of an ERSC-funded Governing the Future City project. The ERSC is examining innovative approaches to urban governance and

planning in Johannesburg, London and Shanghai. The German architectural firm GMP is constructing the city according to global sustainability standards.

Lingang is called mini Hong Kong. Built on 315 square kilometres after the Chinese government's decision to build seven new cities by 2050, Lingang was built for a single reason: to support the new Yangshan Port, as well as the Lingang Industrial zone. The city, which will be home to about 450,000 people, is expected to be delivered by 2020. It is expected to attract 10 million tourists annually.

Sunqiao ... A fully covered agricultural city

Shanghai may be known for its high-rise skyscrapers, but a large part of the city will soon have tall vertical farms where fruit and vegetables grow. Shanghai is creating an integrated agricultural area with high-rise vertical farms and seed libraries within a 250-acre agricultural district called Sunqiao Shanghai. It will include new public plazas, parks, housing, stores, restaurants, greenhouses, and a science museum. Some of the crops will be grown hydroponically indoors.

Smart and quick transport...

Any visitor to Shanghai will be amazed by the abundance and variety of transportation, although it is the most populous city in the world. The city has solved the problem of population density by creating a sophisticated transportation network. One of the city's most important features is the e-payment method through the devices located in the bus stations, metro, tram and even post offices. Moreover, the city has many different transportation means for all social levels.

Shanghai is also known for its underground, which opened its first line in 1993. It is 548 kilometres long and covers the city's suburbs and main urban neighborhoods. In May 2015, the first rapid transit system was established, making it the world's longest mass-transit rail system. Shanghai also has simple, affordable electric buses.

Shanghai is an option for global sustainability exhibitions

Shanghai annually hosts many exhibitions and events on sustainability and the environment as a model for smart cities. It was chosen to host the 12th SNEC International Photovoltaic Power Generation and Smart Energy Conference & Exhibition, organised by the Asian Photovoltaic Industry Association (APVIA), Chinese Renewable Energy Society (CRES), Chinese Renewable Energy Industries Association (CREIA), co-sponsored by 19 agencies and international organisations. As the world's largest new energy exhibition and an important platform for large companies to showcase their advanced products, SNEC displays photovoltaic equipment, materials, cells, application, modular products, solar projects and systems, among others.

Shanghai was selected to host the Smart City Hackathon in April. The event targeted entrepreneurs and university students to build scalable business models on energy efficiency, smart transportation, air quality and waste management.

The event is one of the most important events in the world's largest cities, bringing together experts and academics as well as business leaders and university students from around the world to exchange views and experiences on issues identified at each session by moderators.